Vale Base Metals

Asset Review

Webinar

June 20, 2024

Disclaimer

"This presentation may include statements that present Vale's expectations about future events or results, including without limitation (i) our asset performance expectation on slides 16, 19, 20, 22, 25 and 27; (ii) production guidance on slide 10, 33 and 34, (iii) cost guidance on slide 10, (iv) projects' start-up and capacity additions on slides 25, 26, 27, 29, 30, 33 and 34; (v) expectations on the consolidated outcomes for the Asset Review initiatives on slides 10, 33, 34 and 35; (vi) expenditures to implement Asset Review initiatives on slides 9 and 35; (vii) potential for increase in resources on slides 17 and 23; (viii) expectations for supply and demand of nickel and copper on slides 39, 41, 42 and 45; and (ix) expectations for EV sales on slide 44.

These risks and uncertainties include factors relating to our ability to perform our production plans and to obtain applicable environmental licenses.

It includes 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;

(f) the estimation of exploration target, mineral resources and mineral reserves as well as the development of mining facilities, our ability to obtain or renew licenses, the depletion and exhaustion of mineral reserves.

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. Pathway to Value

Mark Cutifani

VBM Chairman

2. Market update

Tina Litzinger

Chief Commercial Officer

1. Pathway to Value

Mark Cutifani

VBM Chairman

2. Market update

Tina Litzinger

Chief Commercial Officer

We have progressed towards creating a standalone organization...

Successful business Carve-out

- Seamless transition from Vale SA
- New governance in place with a dedicated Board and Executives
- Deal closed with Manara Minerals
- Building tailored strategy and corporate support structures

...but there is still work to be done in 2024 and beyond

PTVI divestment on the right path

- Security of land package
- Securing PTVI's long-term license to operate
- VBM will maintain Ni matte offtake
- Joint governance structure enabling continued stability of operations

...to determine our long-term value proposition and focal points

1st phase of the Asset Review concluded

- Comprehensive assessment of operational sites and projects
- Findings will be embedded into the business processes and plans
- Key focus on operational stability and realization of resource potential

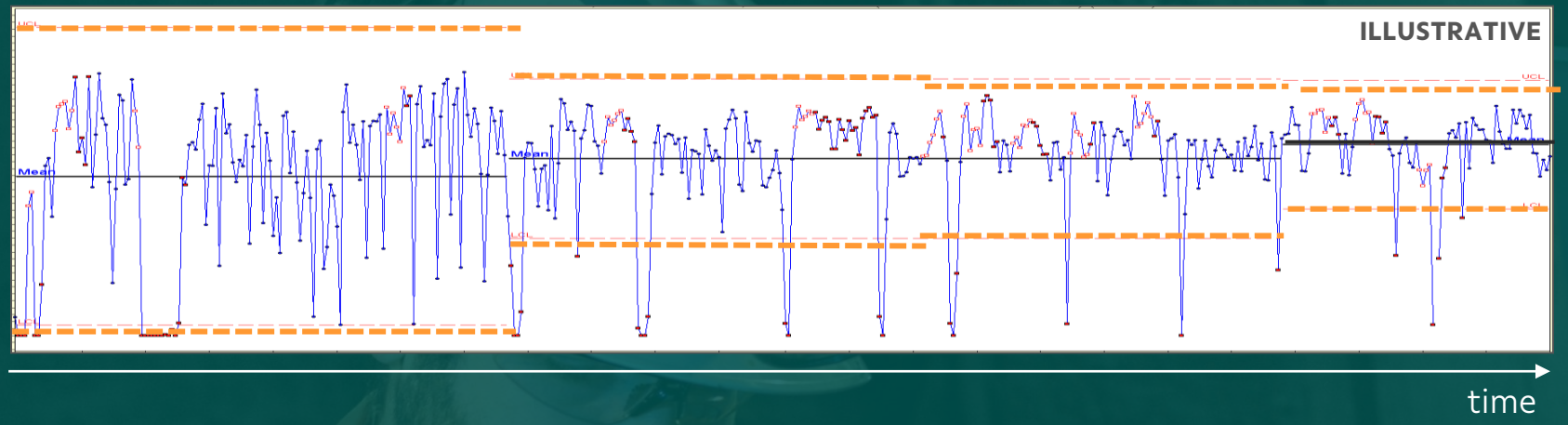
...significant value potential recognized in resources and assets

A "Salt-and-Pepper Review" used to identify and unlock VBM's full potential

Key Levers...

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

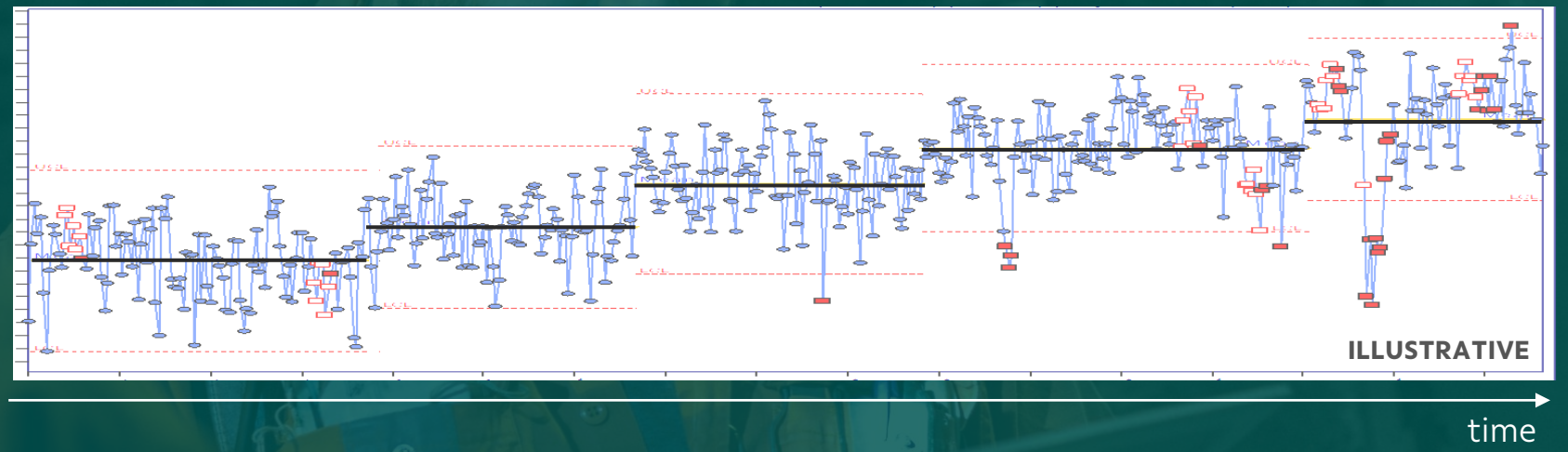
We have a clear path to achieve our full business capabilities...



Step 1:

Control and stabilize

Reduce process variability by managing inputs and process parameters...



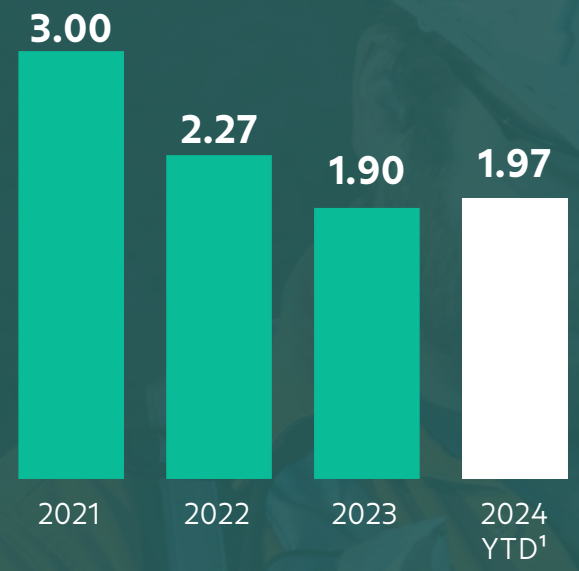
Step 2:

Continuously improve

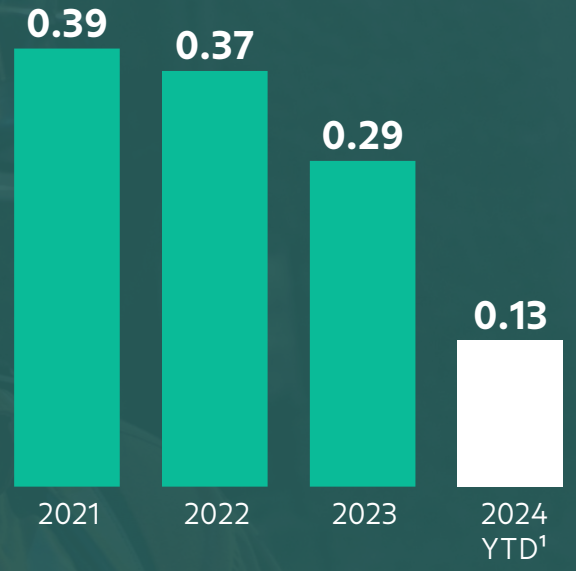
Increase averages with controls to support consistent delivery.

"Sustainable Business Improvement" starts with safety...

Total Recordable Injury Frequency Rate (TRIFR)

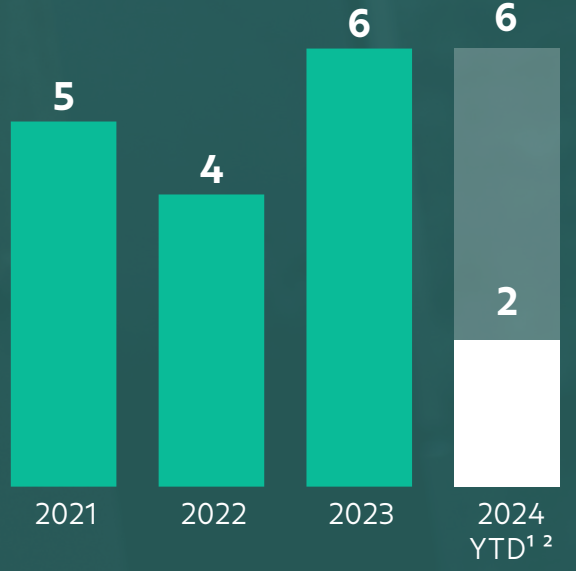


Lost Time Incident Frequency (LTIF)



High Potential Recordable Injuries (N2)

of events



¹ As of April 30th. ² Annualized.

The first phase of execution started this year, leveraging value with targeted investment

Total Expenditure[1] in the next 3 Years

Secure stability...

Capacity run rate & reliability
Enable operating stability and reaching production potential

US$ 650 million

Identify early wins...

Sudbury:
Fill the mill with own sourced metals with higher margins

Salobo:
Improve physical performance to reduce costs and improve margins

US$ 150 million

Pathway to Value...

Exploration & Project development
Delivering long-term value

US$ 350 million

Phase 1:
~$2 billion
potential value creation[2]

[1] Includes costs, expenses and capital expenditures. About 50% refers to CAPEX and 50% to one-off costs & expenses. [2] Assuming potential EBITDA Generation of circa US$ 400 million and a 7x EV/EBITDA target multiple, based on market consensus.

Focus on a 5–10% growth in volume and a 10% decrease in unit costs compared to our 2026 baseline

	2023	2026	Early wins vs. 2026	Phase 1 Target uplift
Copper production kt	321	375–410	+5%	30% productivity uplift in Sudbury
Cu All-in[1] '000 per metric ton	$3.4	$3.5–4.0	–10%	10% reduction in costs at Salobo
Nickel production kt	165	190–210 (210–230kt incl. Indo JVs)	+10%	30% productivity uplift in Sudbury
Ni All-in[1] '000 per metric ton	$16.9	$11.5–13.5	–10%	Fixed cost dilution at Sudbury

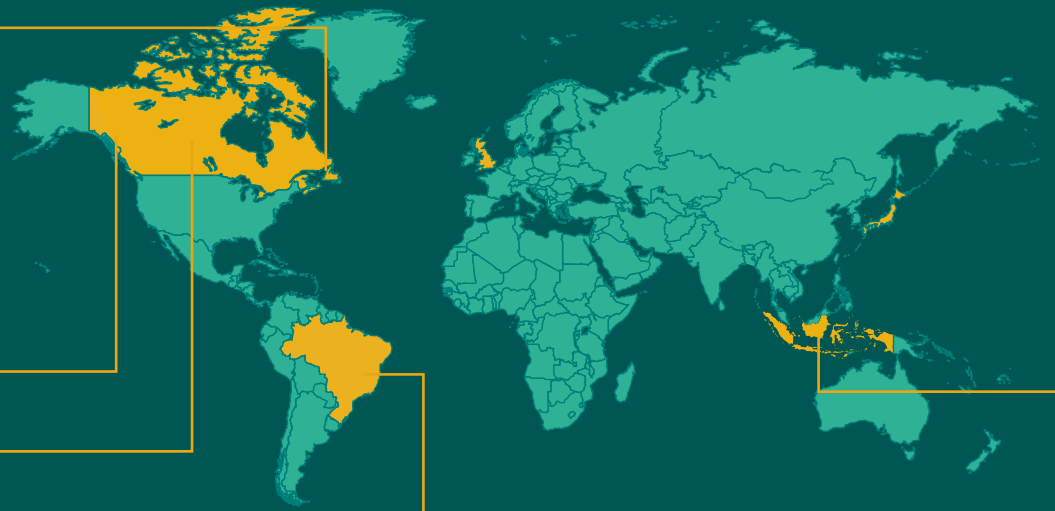
[1] EBITDA breakeven. It does not include sustaining capital.

A "Critical Path" has been developed for each asset...

Voisey's Bay
Mine & mill potential

Thompson
Ultramafics potential

Sudbury
Mines capability & processing utilization



Salobo
Redefine production based on the asset's full potential

Sossego
Maximize production while addressing the mine plan

Onça Puma
Stability & growth

Hu'u
De-risk

Carajás
Alemão project optimization

COPPER | NICKEL | POLYMETALLIC | GROWTH

Salobo:
Redefine production based on the full potential of the asset

Short-term focus
- Stabilize performance at Salobo 1 &2
- Ramp-up of Salobo 3

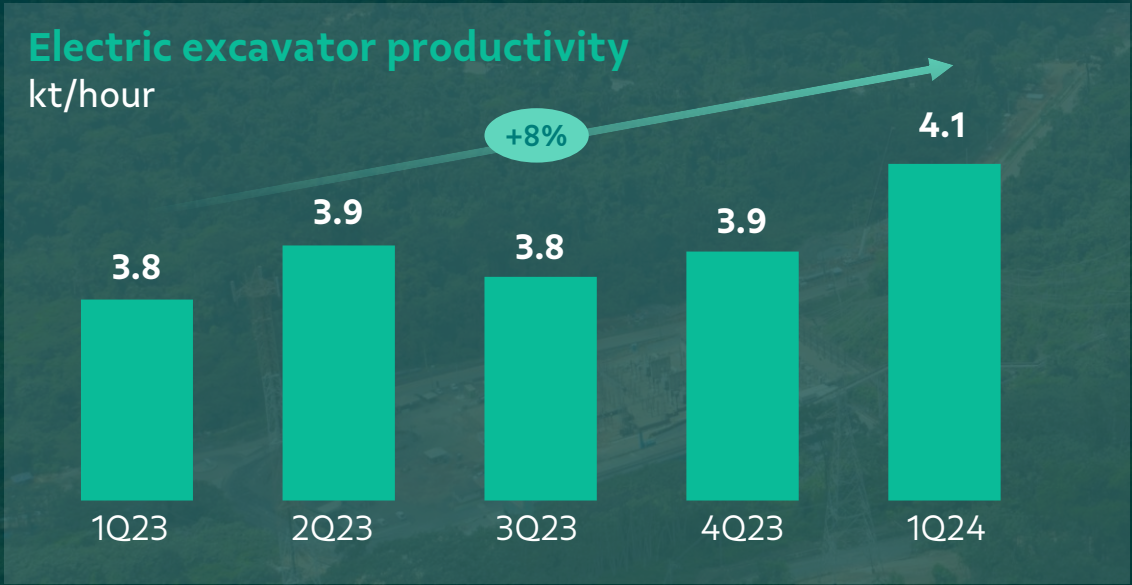
Pathway to value
- Validate the resource potential
- Optimize asset life and capacity

Salobo

Short-term focus on productivity improvements

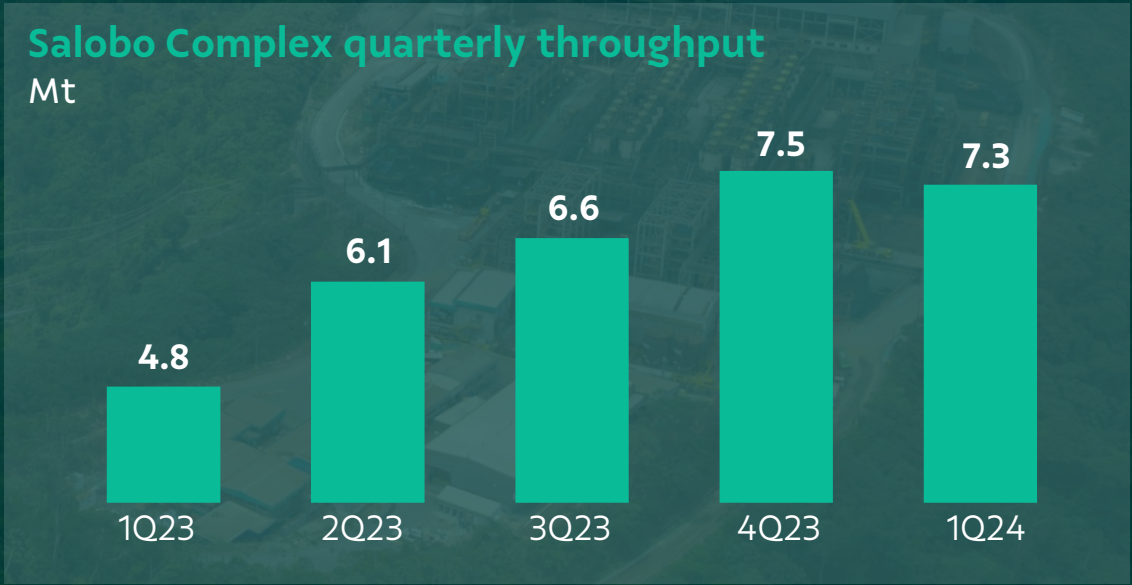
Improve asset reliability

Maintenance strategy to improve mine equipment reliability



Ramp-up to full capacity

Remove bottlenecks at Plants 1 & 2 and ramp-up Salobo 3



Salobo

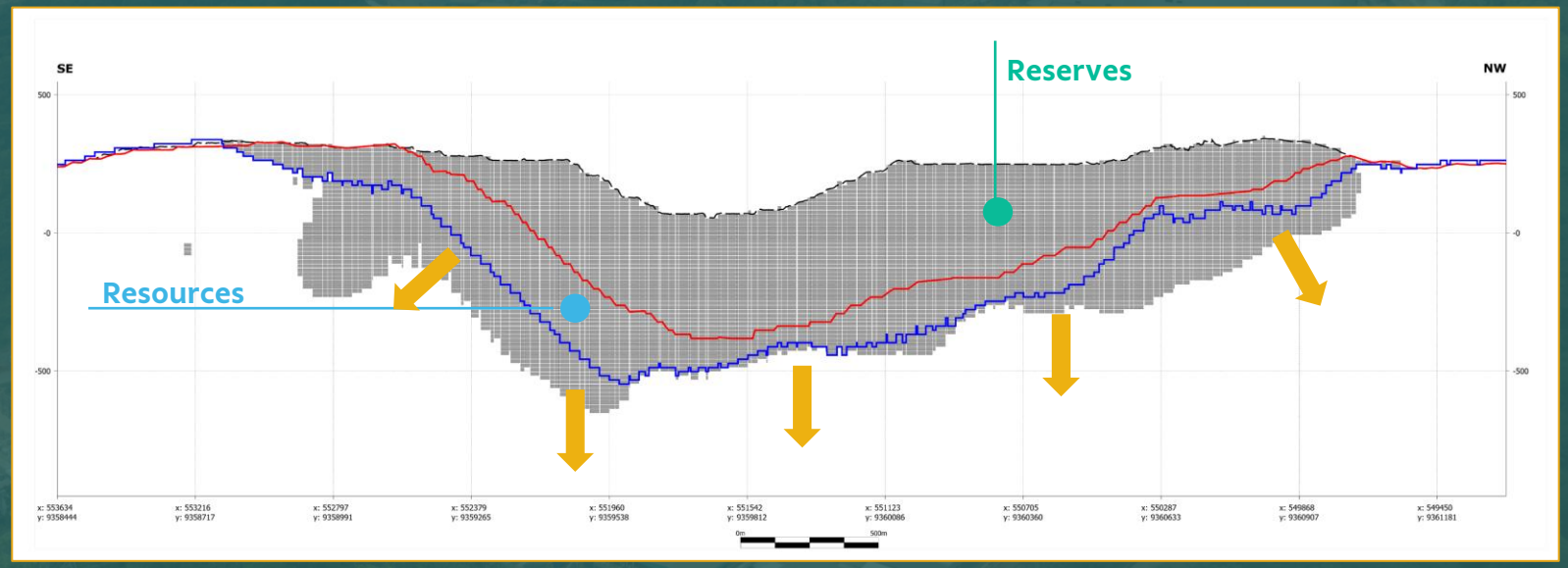
Resources are a key driver of operational value

Potential to add significant resources
through additional drilling

Extending the life of the asset
through additional resources, cut-off grade strategies

Increase throughput by 30%
through technological development such as Coarse Particle Flotation

Salobo pit cross section



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

Current Resources[1]:
551 Mt @ 0.47% Cu and 0.23 g/t Au

[1] Mineral Resources (Measured and Indicated categories) exclusive of Mineral Reserve as of December 31, 2023, and shown in 100% basis.

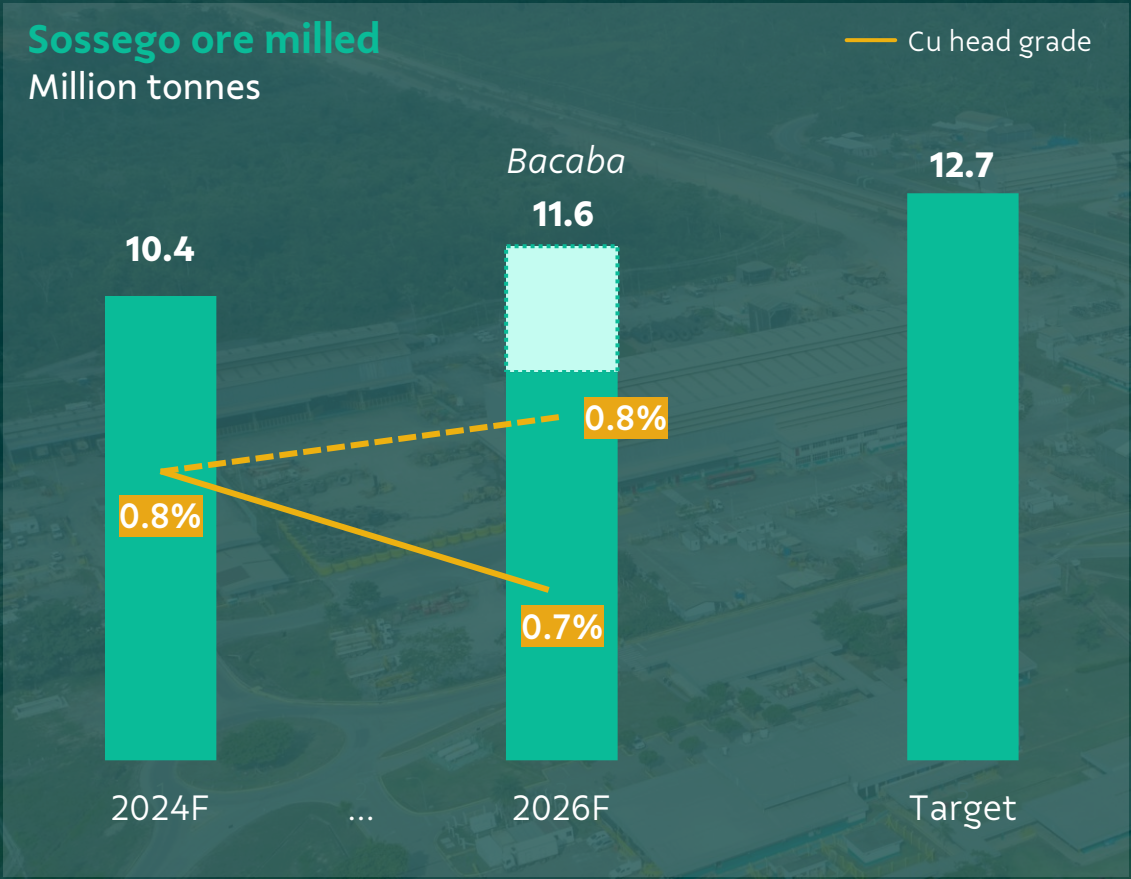
Sossego:
Maximize production while addressing the mine plan

Short-term focus
- Feed stability
- Bacaba project approval

Pathway to value
- Fill the mill at ~13 Mtpy – full capacity
- Optimize sequencing paths at the South Hub

Sossego

Opportunities to maximize mill utilization through sequencing



Stabilize plant feed as current mines deplete
by improving operating conditions at the pit

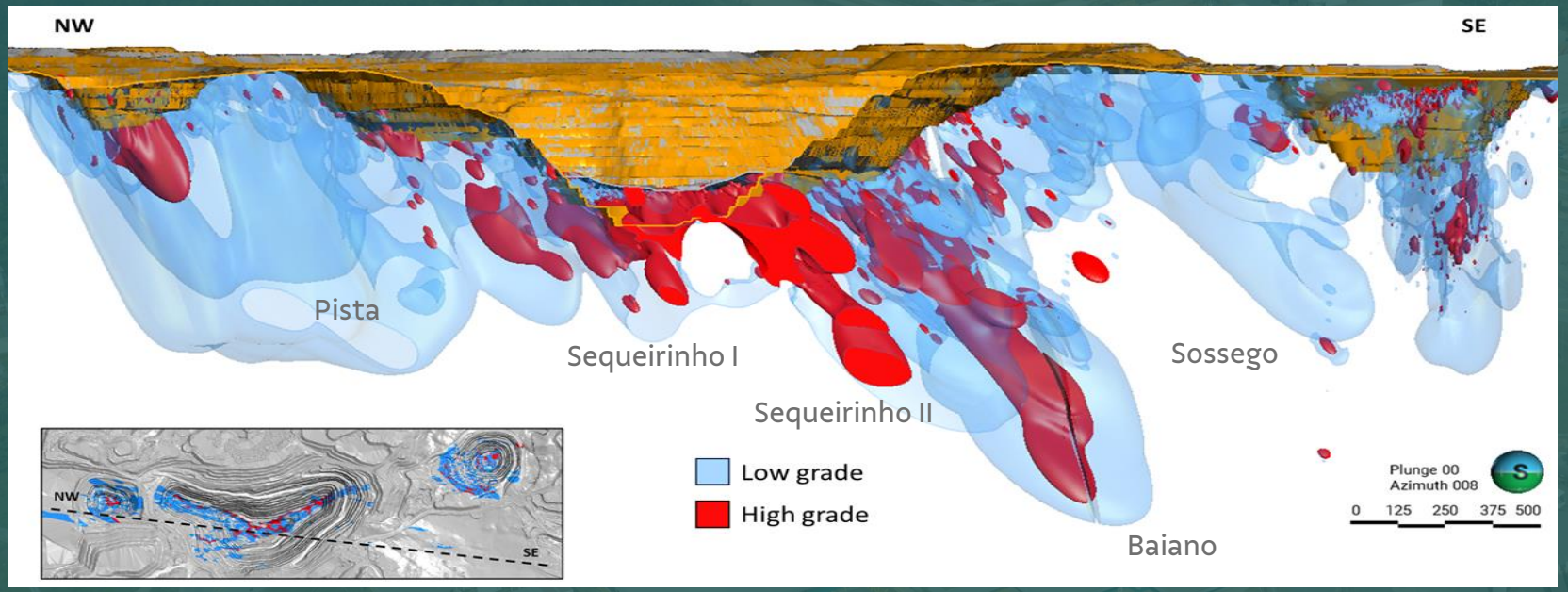
Advance on licensing for Bacaba
aiming towards a collaborative solution with authorities

Optimize South Hub sequencing
through investments in geological drills to optimize sequencing paths

Sossego

Conceptual studies suggest a potential for bulk underground mining methods at current mines

Sossego mines: cross section – Undeground Potential



Opportunity for underground mining

potential of >50 Mt of ore (~850kt Cu) amenable for U/G mining[1]

Define the Mining Strategy

incremental production vs. protection of value in the crown pilar

[1]U/G opportunity is not currently Mineral Resource. There is still uncertainty if further exploration will result in the target being delineated as a Mineral Resource.

Sudbury:
Mines capability & processing utilization

Short-term focus

- Take the mill to ~5 Mtpy
- Increase mine development to drive higher ore availability

Pathway to value

- Take the mill to 7+ Mtpy
- Understand the resource endowment and validate its potential

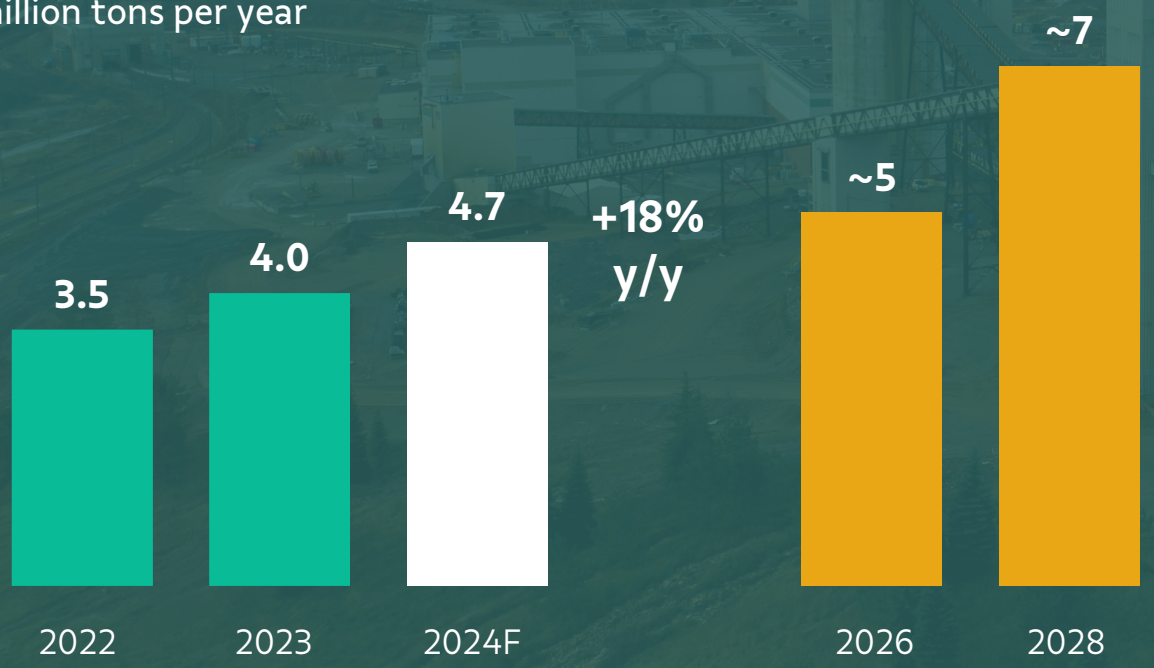
VALE

Sudbury

Fill the mill roadmap

Ore to mill

million tons per year



Improve mine development
to de-risk the current plan and grant future ore

Short-term payback projects
with low CAPEX, adding lower grade ore tonnes

Application of a new cut-off grade guidance
to improve the projects' feasibility and minimize costs

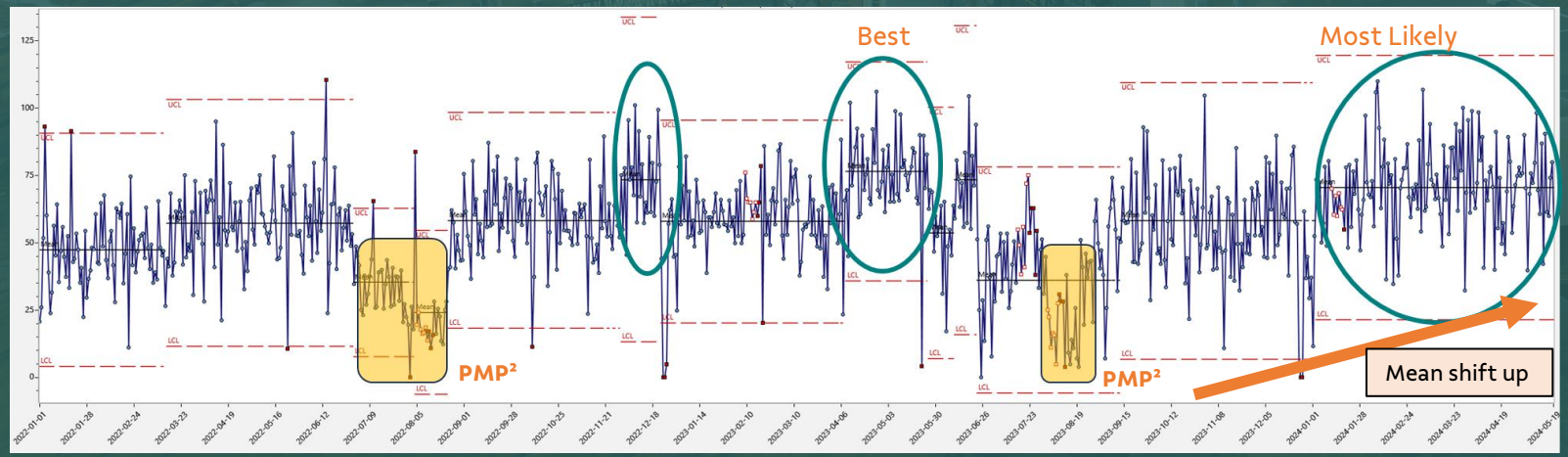
Full review of replacement projects
to optimize CAPEX and sequencing

Sudbury

Improvements underway will bring more tons forward at current mines

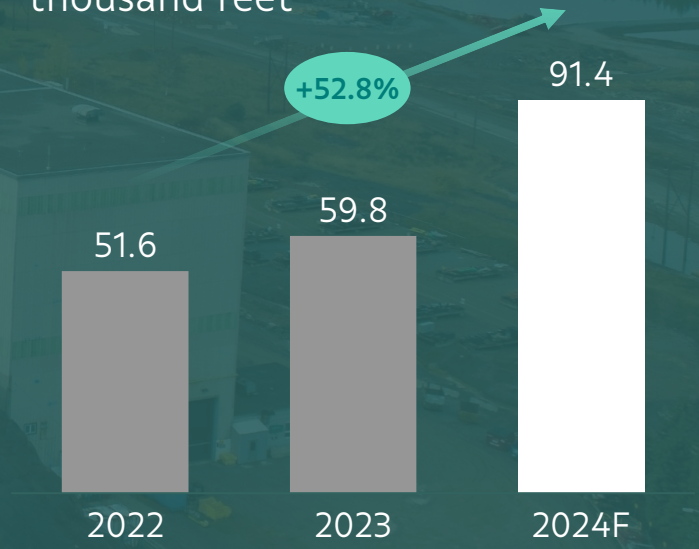
Consistent work to deliver development rate improvements

Daily reported development[1], Jan/2022 to May/2024, all Sudbury mines



Total development to access current and future mines

thousand feet



[1] Daily rates include both Vale and Contractor. Based on daily round count reconciled with ME Survey normalized for 2024. Growth and R&D included. [2] PMP refers to the yearly Planned Maintenance shutdown.

Sudbury

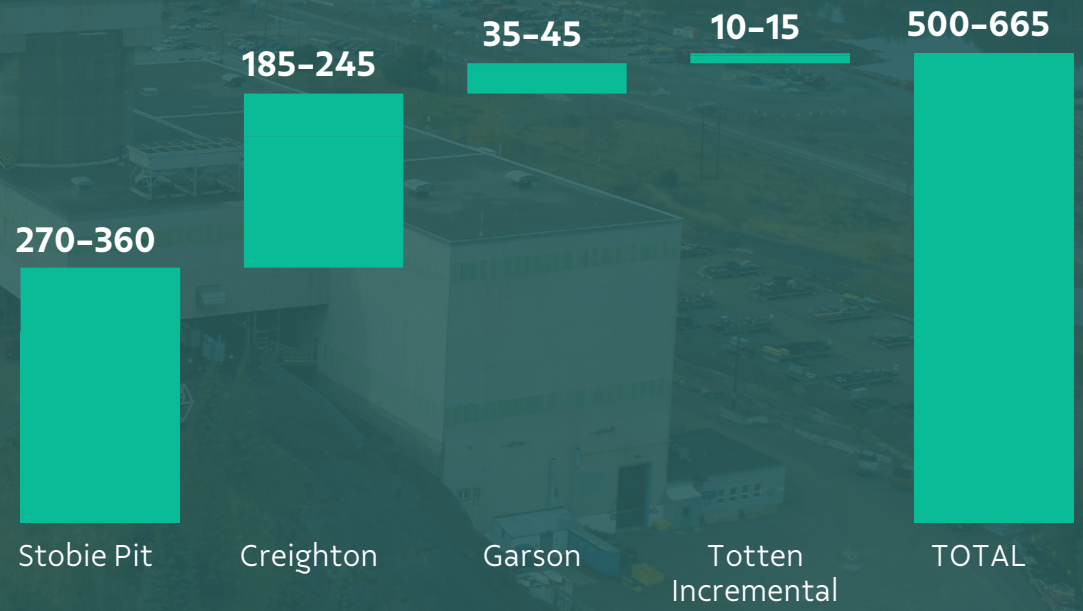
The team has mapped opportunities to increase mine output by changing cut-off and extraction strategies

E.g. change in cut-off grade strategy

as presented on Vale Day 2023

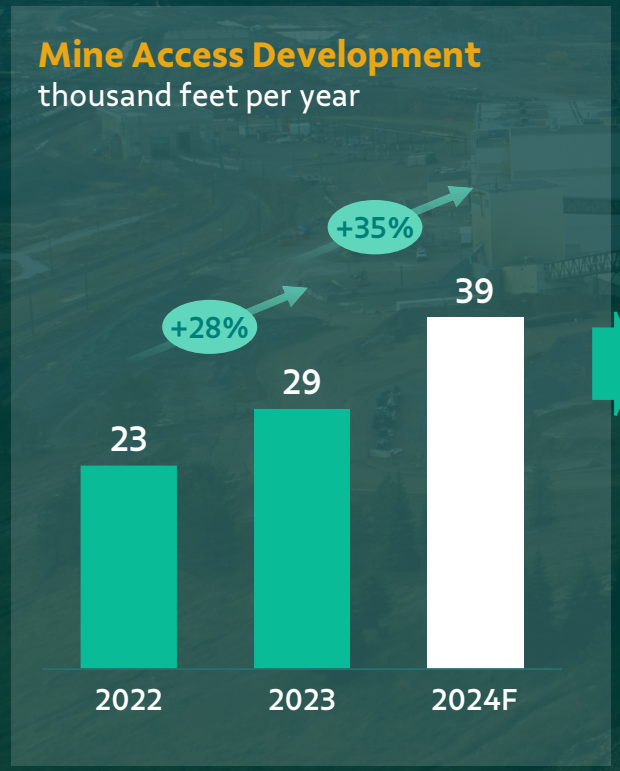
Planned ore to mill additions in 2024

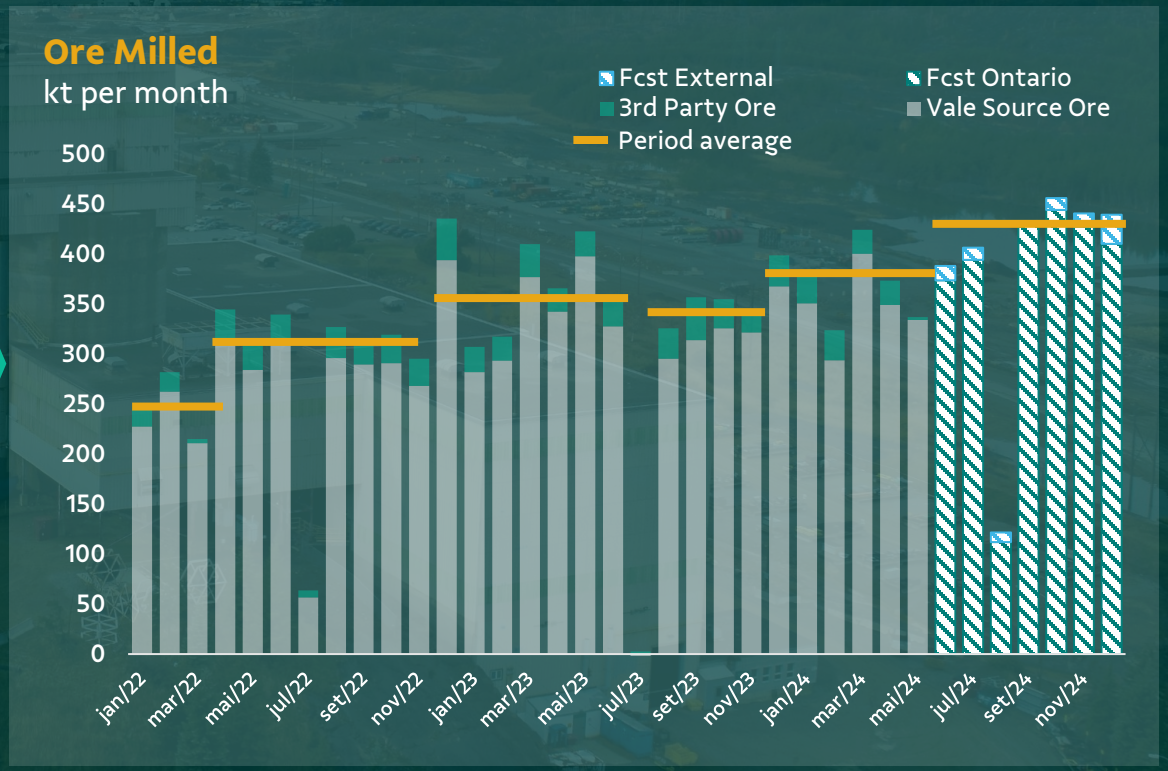
ktpy



Sudbury

Our strategic pivot has started with a significant uplift in development, production, and margins



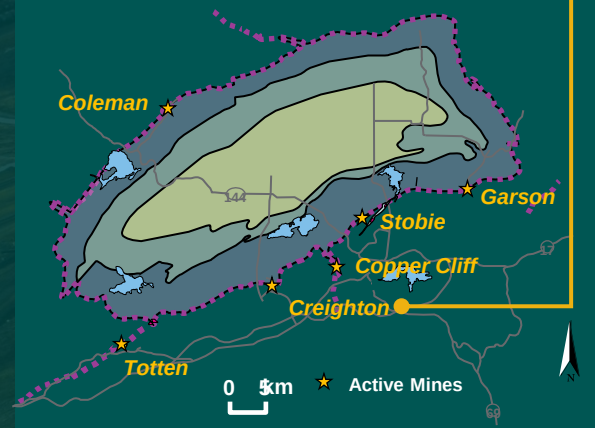


Unit Costs in Sudbury in 2024 are expected to decrease ~$ 2,000/t y/y

Sudbury

Significant polymetallic potential at the Sudbury basin

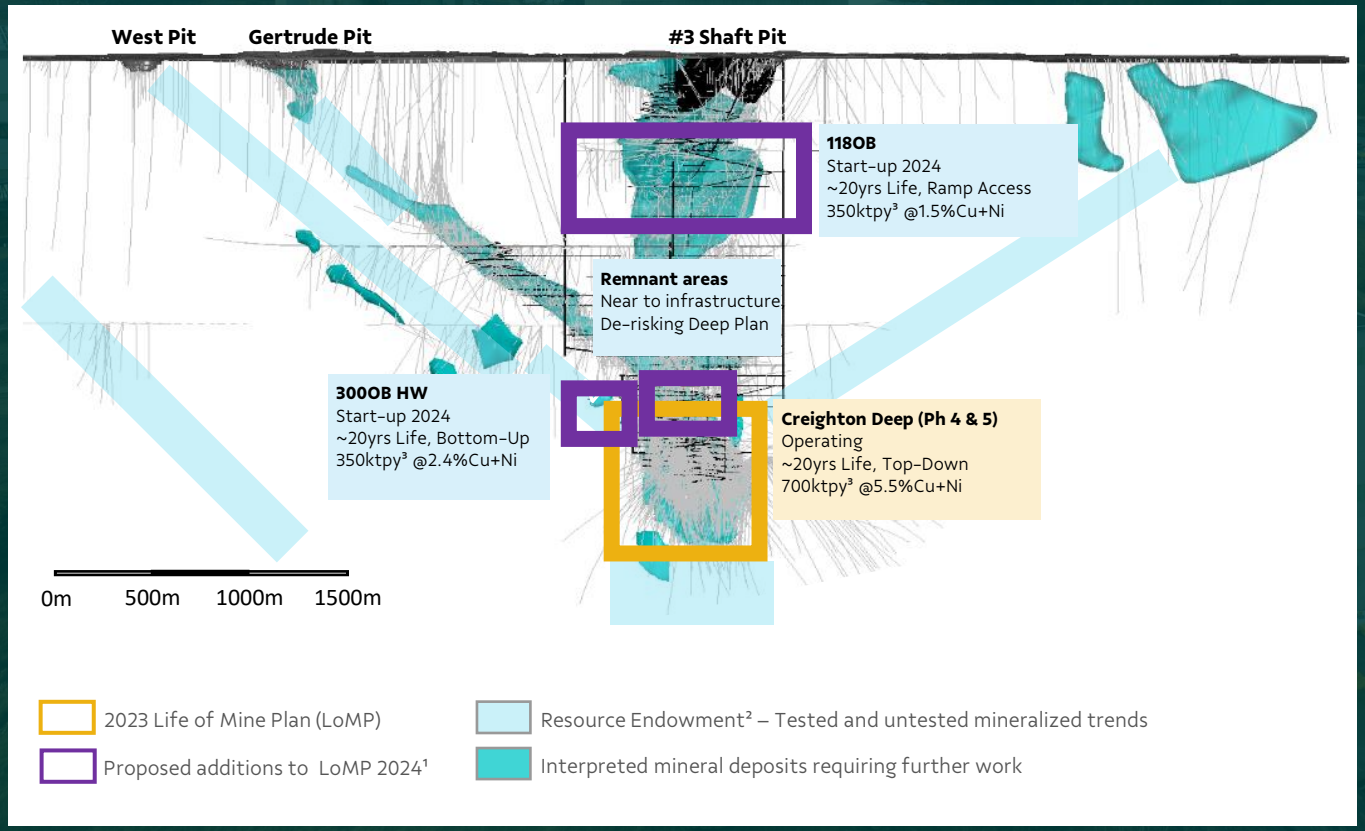
Sudbury Basin



Total Sudbury Reserves[4]
75 Mt @ 1.42%Ni; 1.37% Cu; 0.84 g/t Pt; 1.01 g/t Pd; 0.32 g/t Au

Total Sudbury Resources (M&I) [4]
40 Mt @ 1.37% Ni; 2.41% Cu; 1.16 g/t Pt; 1.47 g/t Pd; 0.49 g/t Au

The Creighton case



High probability of delivering new ore
through an increased focus on exploration in the Sudbury Basin

Additional ore to mill in the next 2 years
at Creighton through a revised extraction approach

[1] Draft 2024 LoMP. [2] Resource endowment potential is conceptual in nature and there is no guarantee further exploration will result in delineation as a mineral resource. [3] All units in metric tons. [4] Mineral Resources (Measured and Indicated categories) exclusive of Mineral Reserve as of December 31, 2023, and shown in 100% basis. Mineral Reserve as of December 31, 2023, and shown in 100% basis.

Voisey's Bay:
Mine & mill potential

Short-term focus

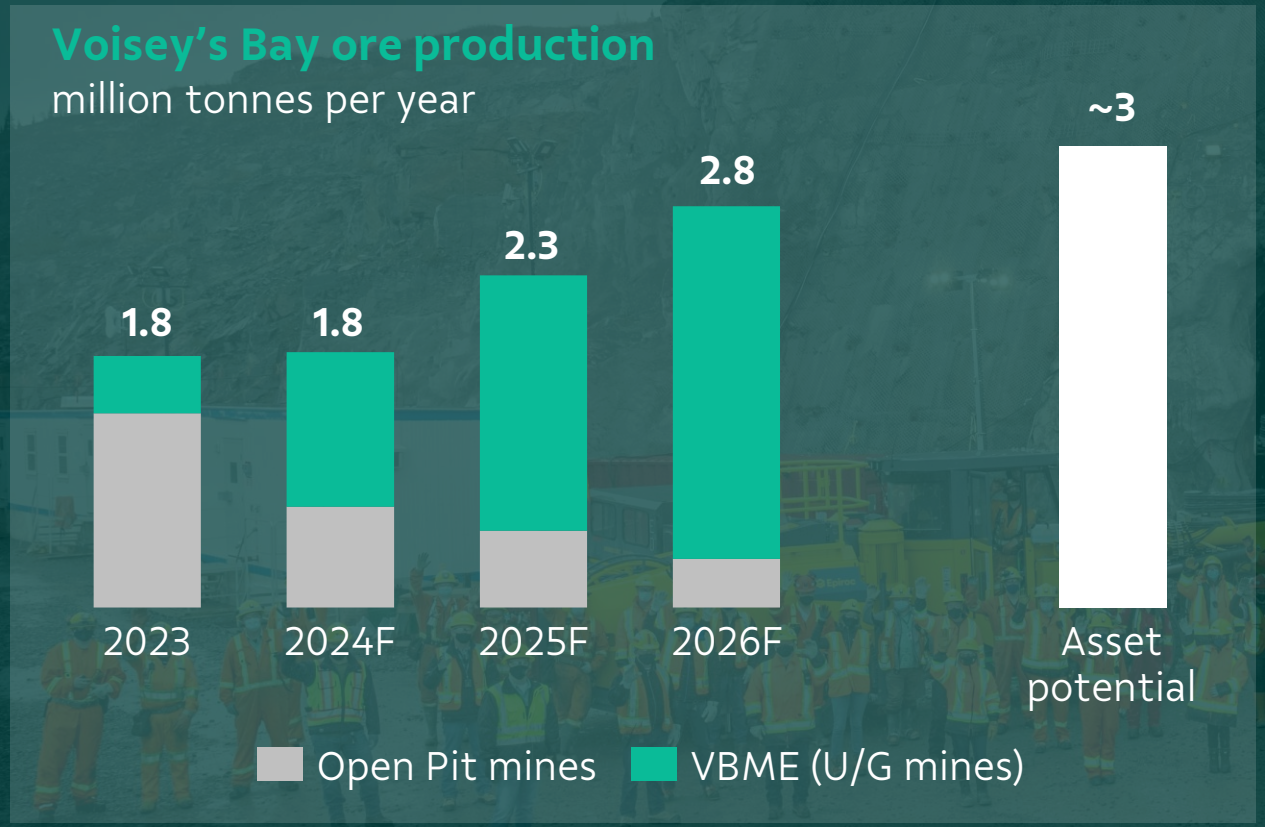
- Complete and fully ramp-up VBME
- Maximize mill throughput capacity

Pathway to value

- Understand the resource endowment
- Extend life of mine

Voisey's Bay

Bring the asset to reach its potential with the VBME ramp-up and low-grade ore additions



Voisey's Bay Mine Project Ramp-up

completion expected by 2H26.
Production: 45 ktpy of Ni; 20 ktpy of Cu; 2.6 kt of Co

Maximize mill throughput to ~3 Mtpy (+10%)

by using lower grade material and potentially disseminated ore from Eastern Deeps mine

Improve life of mine plans and mine designs

by further understanding the resource endowment

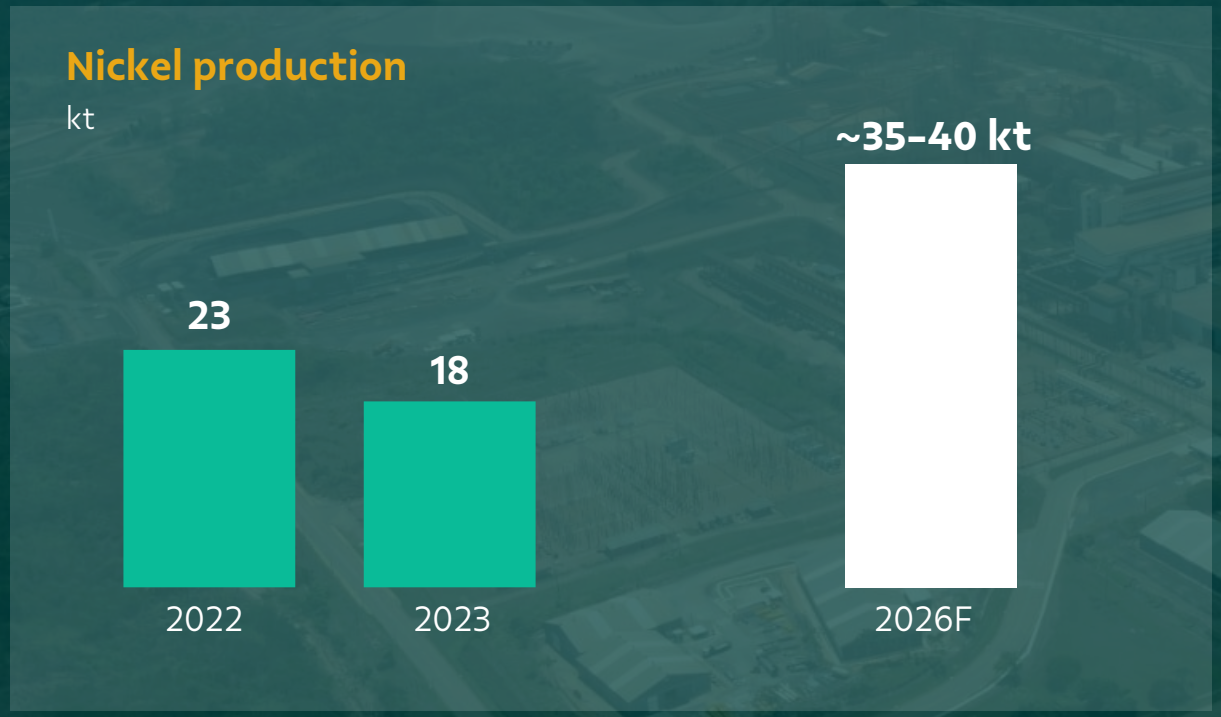
Onça Puma:
Stability & growth

Short-term focus
- Add 12-15 ktpy through Furnace 2 implementation

Pathway to value
- Assess flowsheet processing options

Onça Puma

Continue to implement the Furnace 2 project while assessing flowsheet opportunities



Significant improvement in asset reliability
through furnace 1 rebuild and additional maintenance work

Furnace 2 project under execution
with the project's physical progress standing at 39%. Start-up is expected by 2H25

Assessment of flowsheet optionalities
as production increases, teams are looking at different processing alternatives (e.g. Class 2-to-class 1 conversion; processing at Long Harbour)

Further 10% cost decrease at Onça Puma from the Furnace 2 project and productivity improvements

Growth:
Project Optimization

Pathway to value

- Review of growth options aiming to improve returns
- Select quality opportunities for value creation

Growth

Alemão project optimization: Targeting more efficient cost and capital investment

CAPEX: Simplify the processing flowsheet
reducing capital requirements

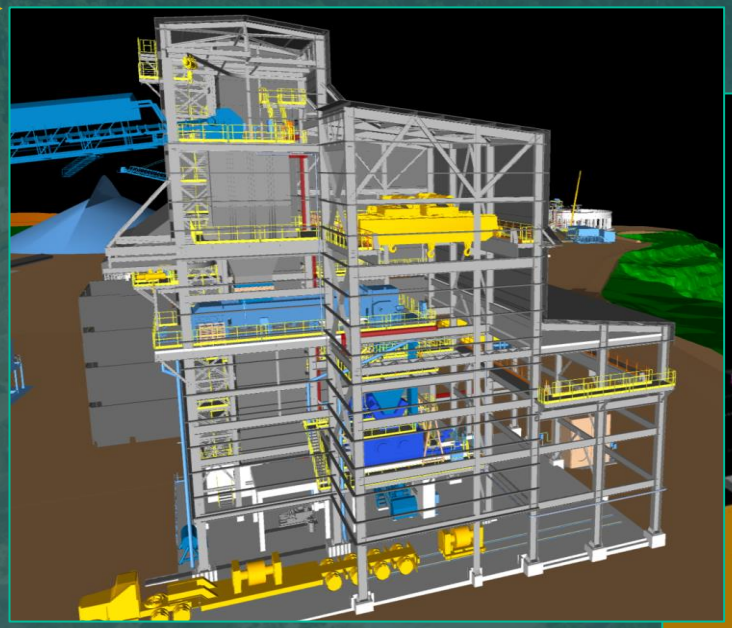
OPEX: Optimize mine plan and method
through alternative mining strategies

The Alemão Project

122.7 Mt Measured and Indicated resources @1.65% Cu; 1.22 g/t Au [1] [2]

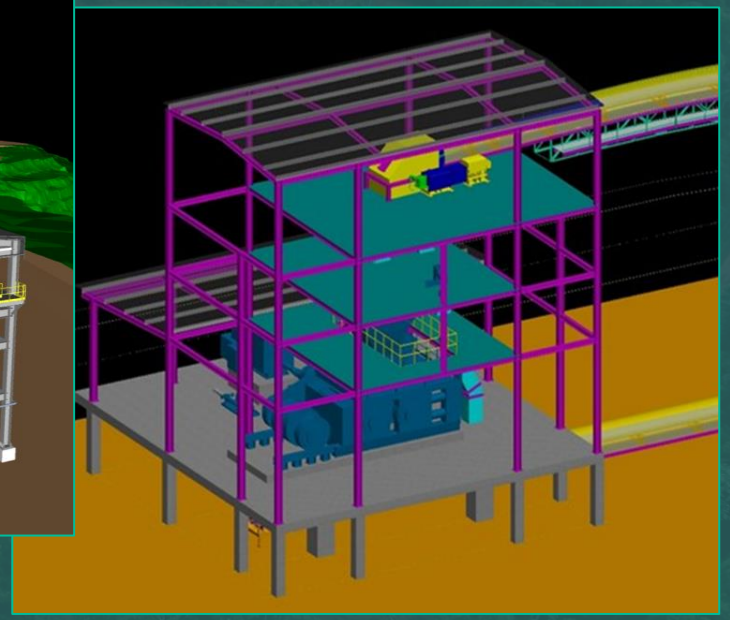
60+ ktpy Cu production, 21-year mine life

Investment decision by 2025



Previous HPGR[3] layout

Simplified HPGR[3] Layout



[1] Mineral Resources (Measured and Indicated categories) exclusive of Mineral Reserve as of December 31, 2023, and shown in 100% basis. Values have been rounded.[2] Reported Mineral Resources are not mineral reserves and do not have demonstrated economic viability at this time [3] High Pressure Grinding Rolls.

Growth

Hu'u project de-risk: Significant opportunity... advancing on solutions to resolve technical challenges

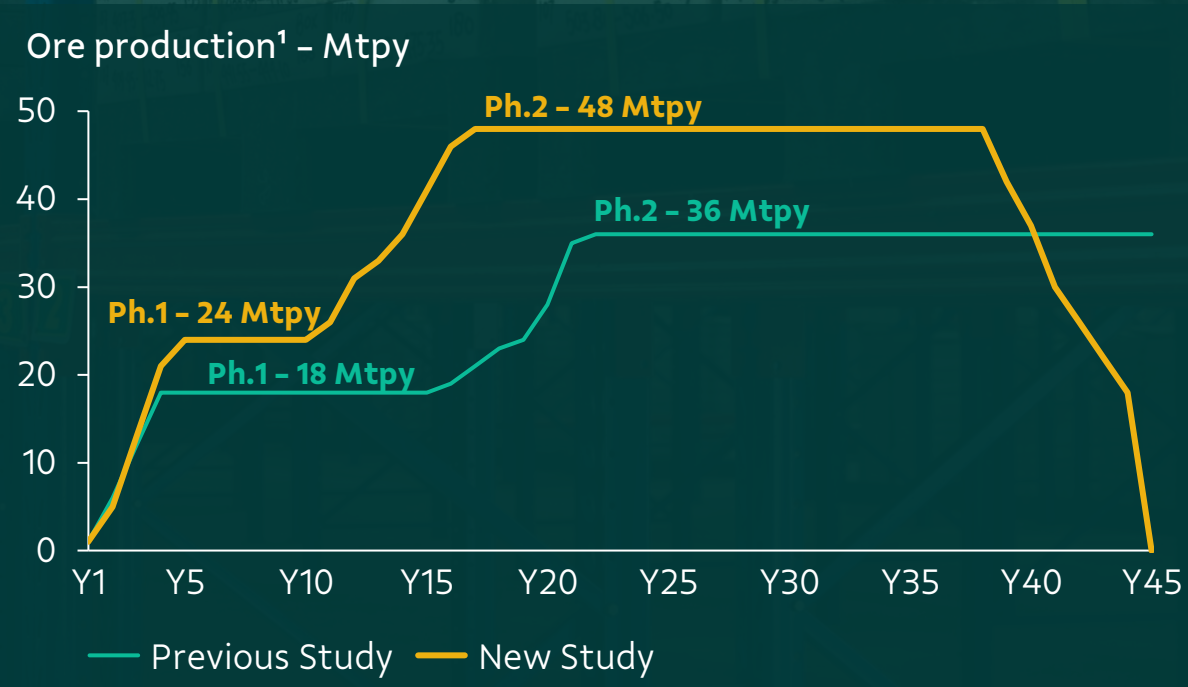
Pre-mining cooling and dewatering confirmed
through an extensive hydrogeological data collection program

Lower-than-expected operational temperature
confirmed

Increased mined production rate
through a two-staged development approach

Government and community support
provides a strong foundation for project development

Bring mine production forward



Significant value opportunity[1]

2.1 Bt resource @0.86% Cu and 0.48 g/t Au[2]
Production: 300–350 kt/a Cu and 250–300 koz/a of Au
Investment decision by 2028

VALE

[1] Figures shown in 100% basis. Hu'u is 100% owned by PT Sumbawa Timur Mining (STM), an Indonesian private joint-venture company owned by Eastern Star Resources Pty Ltd (80%) and PT Aneka Tambang (20%). Eastern Star Resources Pty Ltd is 100% owned by Vale Base Metals Ltd. [2] Mineral Resources (Measured, Indicated and Inferred categories) exclusive of Mineral Reserve as of December 31, 2023, and shown in 100% basis.

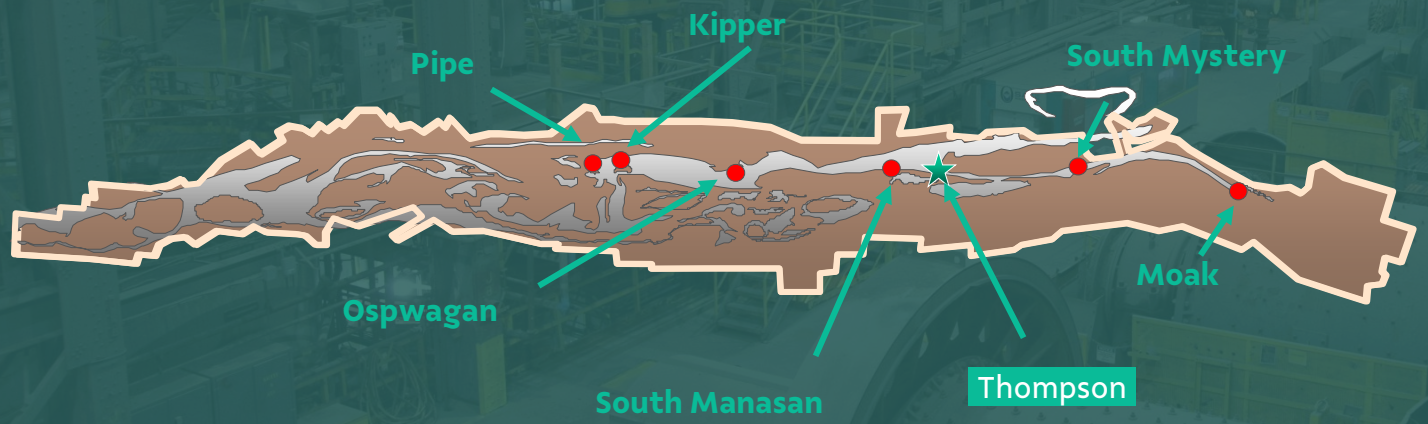
Growth

Ultramafics: a Canada-based nickel growth opportunity

Thompson Nickel Belt: large ultramafic-hosted deposits

Ultramafics potential[1]

550-1,650 Mt @ 0.3-0.6% Ni



Metal recovery technically proven

through tests with Pipe Lake Mine historic piles

Next step: scale up

additional tons from Pipe to provide incremental ore production for Thompson mill

Improve projects' feasibility

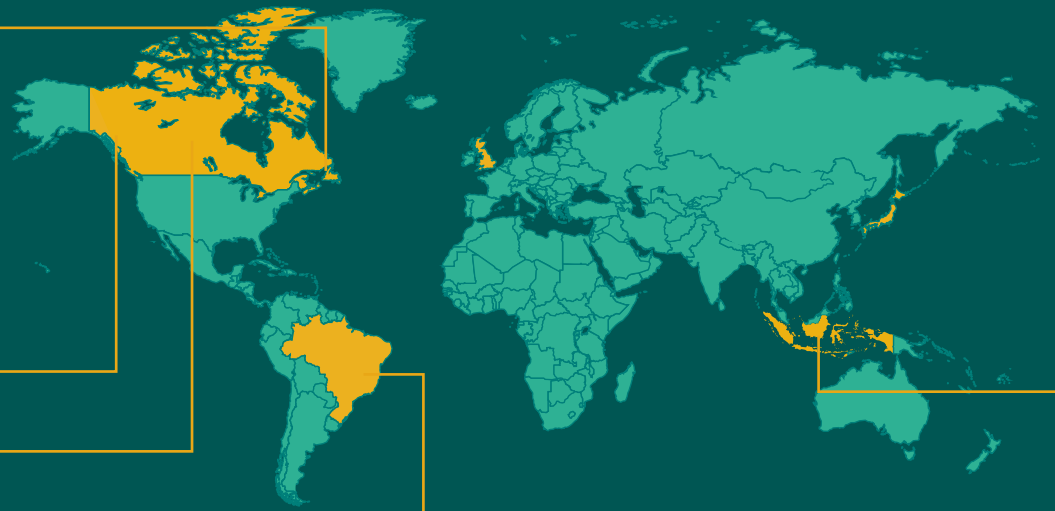
through alternative mining strategies (e.g. cut off grade)

Assess resource endowment

through additional drilling campaign

[1] Exploration Targets are conceptual in nature and there is insufficient geological and engineering information to meet the definition of a mineral resource. It is uncertain if further exploration will result in the exploration target being delineated as a mineral resource.

A "Critical Path" has been developed for each asset...



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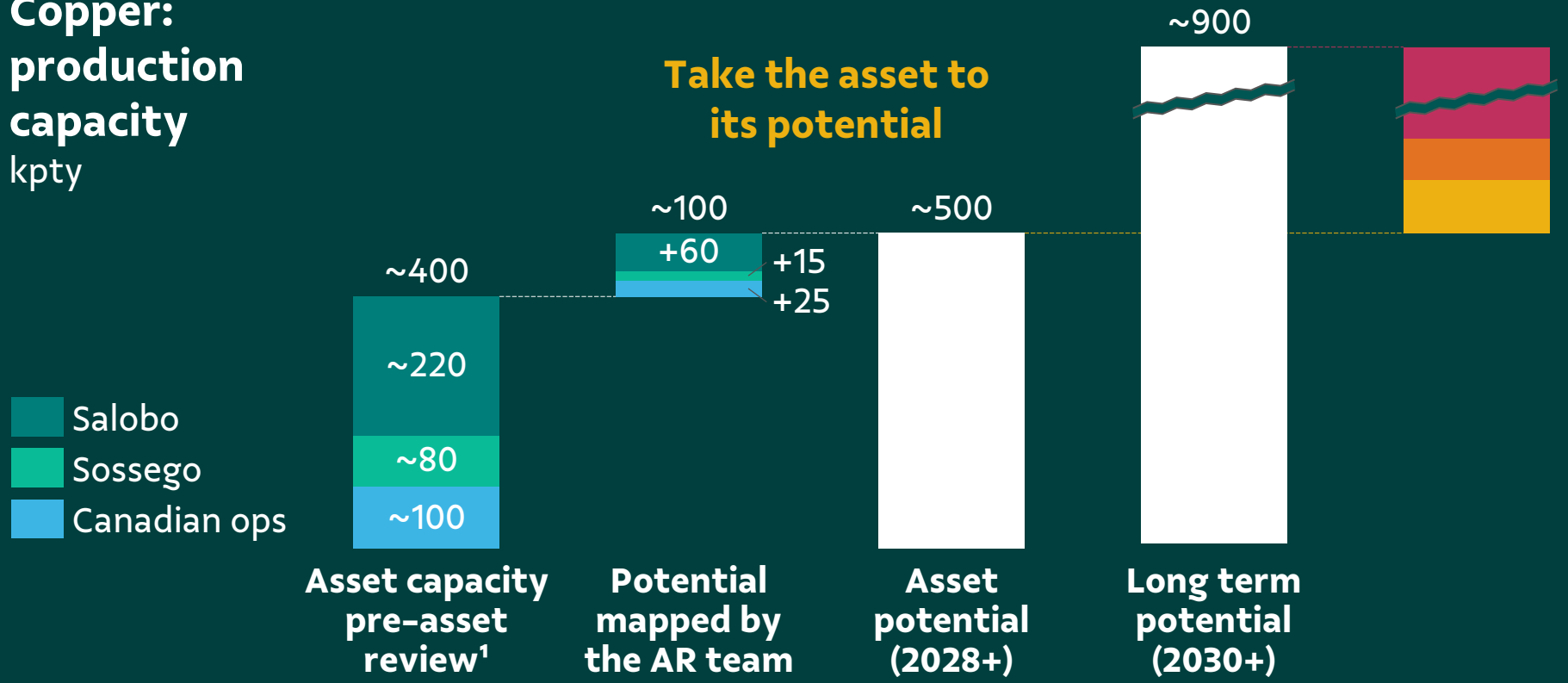
From the Asset Review, we have mapped a potential to add up to 100 ktpy of copper...

Copper: production capacity
kpty



Growth

Hu'u (300–350 ktpy)

Alemão (~60–70 ktpy)

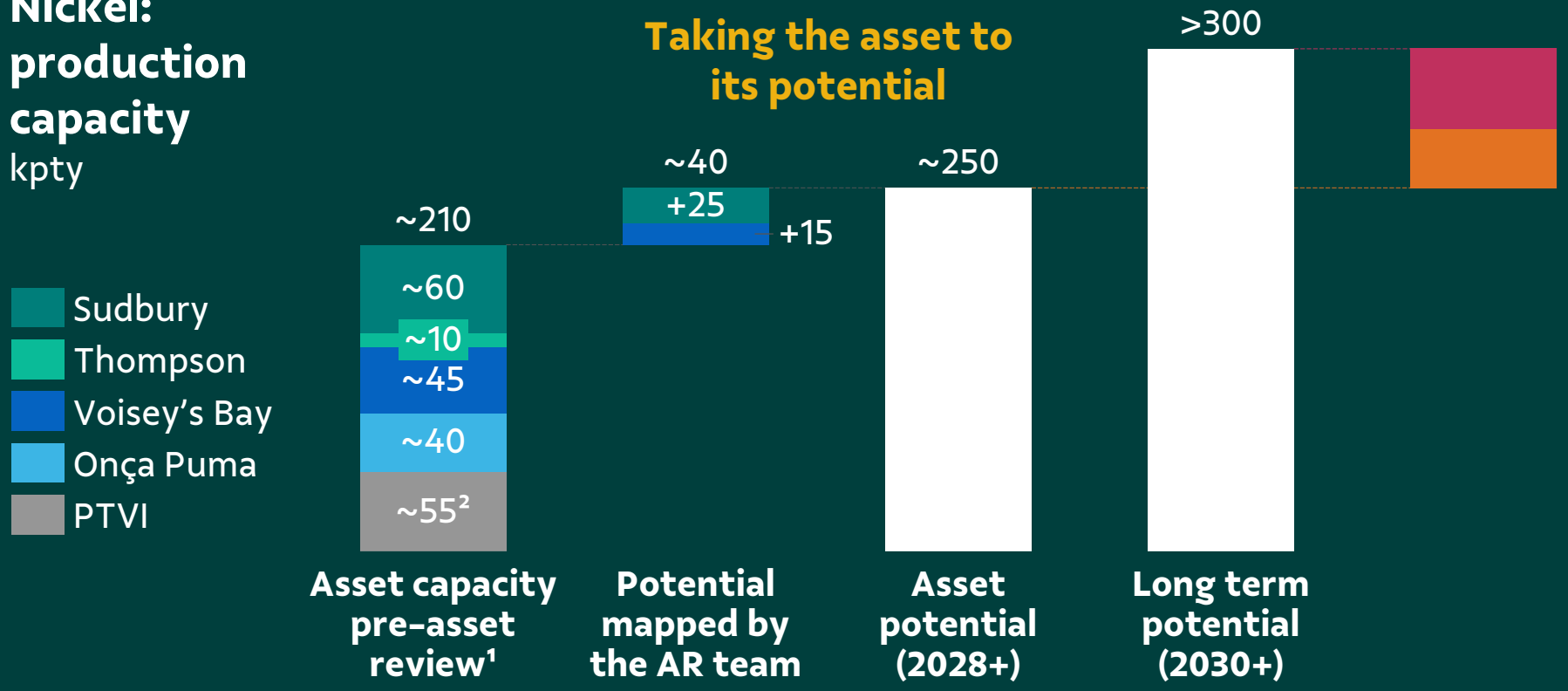
North Hub (70–100 ktpy)

¹ Considering the 2026 market guidance provided on Vale Day 2023.

… and ~40 ktpy in nickel, through productivity improvements and low-capital initiatives

Nickel: production capacity

kpty



Growth

Indonesian JV's (~20 ktpy³)

Ultramafics (~40 ktpy)

¹ Considering the 2026 market guidance provided on Vale Day 2023. ² Reflects the 80% offtake that VBM holds from PTVI Ni matte production. ³ Reflects the payable nickel in ore from Pomalaa and Sorowako HPAL; 49% share on Morowali/Bahodopi project; and VBM's 33.9% share on PTVI after divestment.

A phased approach is underway, aiming to capture the full value of our assets

Full asset potential

Increase profitability, generating capital to fund next stages

Early wins (up to 2026)

Volume up by 5–10%

Costs down by 10%

Deliver asset potential (2028+)

Capacity increase through productivity and low-CAPEX initiatives...

- **Up to ~100 kt of copper**
- **Up to ~40 kt of nickel**

... leading to unit cost decreases

- **Up to 2,000 in Ni**
- **Up to 1,000 in Cu**

Longer term potential (2030+)

Carajas Copper

Ultramafics

Hu'u

Innovation and technology

...

and beyond

	Early wins (up to 2026)	Deliver asset potential (2028+)	Longer term potential (2030+)
Δ EBITDA[1]	**~$400 million**	**~$1.3 billion**	**BEYOND**
TotEx[2]	**~$800 million**	**~$3.3 billion**	
Value[3] 7x multiple	**~$2 billion**	**~$6 billion**	

Cumulative

[1] Refers to incremental EBITDA for the business considering the implementation of asset review initiatives. Key assumptions: nickel price of $18,000/t; copper price of $8,500/t; copper TC/RC discount of US$ 500/t of payable copper. For every US$ 1,000/t variation in nickel price, Δ EBITDA varies by ~US$ 40 million; for every US$ 1,000/t variation in copper price, Δ EBITDA varies by ~US$ 100 million. [2] Comprises CAPEX and one-off costs. [3]Average industry multiple reference .

On the right path...

Focused on building core business processes for operations stability and improvement

"Effective and efficient" operations will provide the foundations for margin and value growth

Tackling early wins and project design optimization before accelerating growth

Encouraging results achieved in 2024... but asset reliability needs step-change process

... to enable consistent value generation

1. Pathway to Value

Mark Cutifani

VBM Chairman

2. Market update

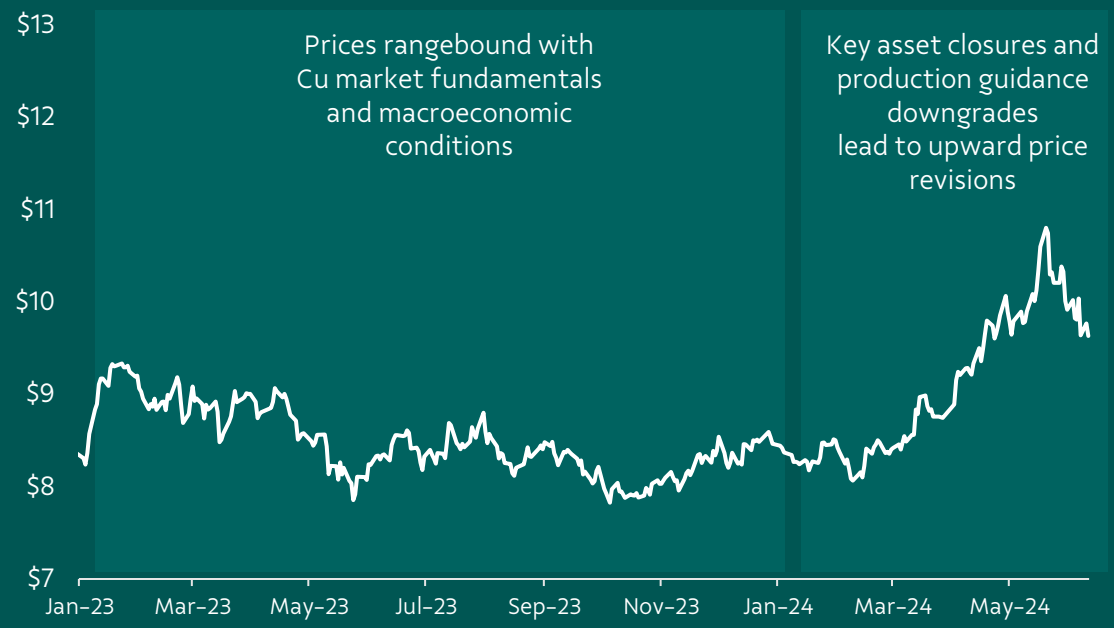
Tina Litzinger

Chief Commercial Officer

Recent price movements reflect increased volatility, especially in supply

LME Copper Cash Price

US$'000 /t

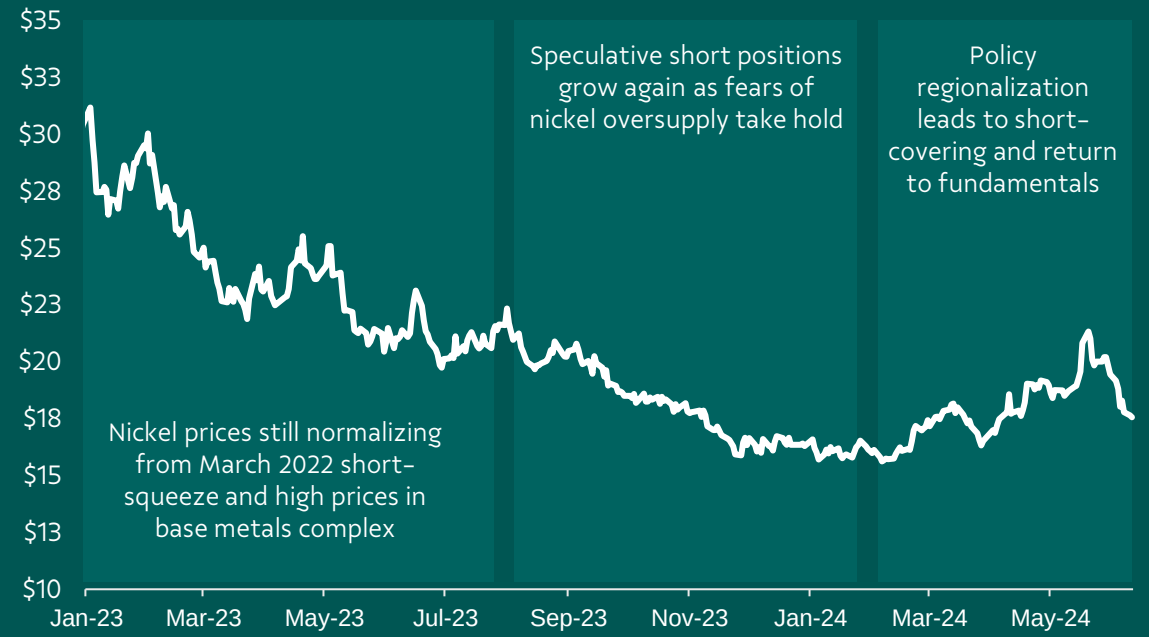


2023: $8,478/t	2024 YTD: $9,046/t

Avg Price

LME Nickel Cash Price

US$'000/t



2023: $21,474/t	2024 YTD : $17,559/t

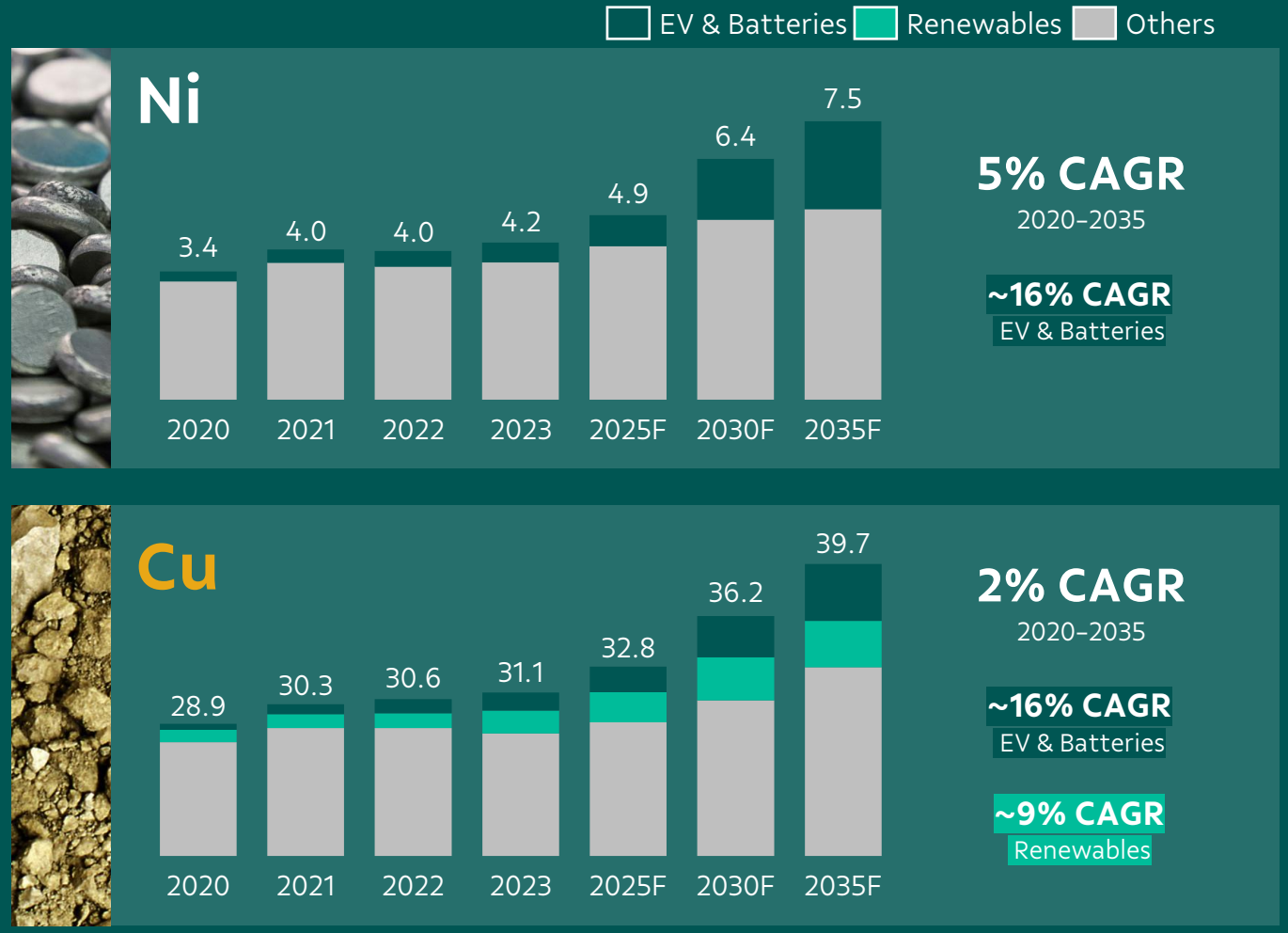
Avg Price

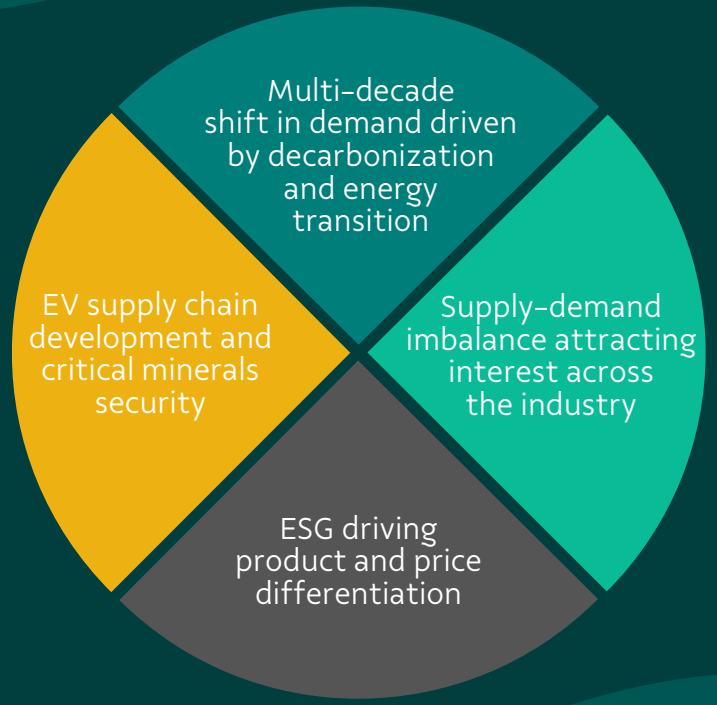
Source: Vale Base Metals (VBM) Marketing, Bloomberg.

Our long-term industry outlook remains unchanged

Total demand

million tons of finished metal



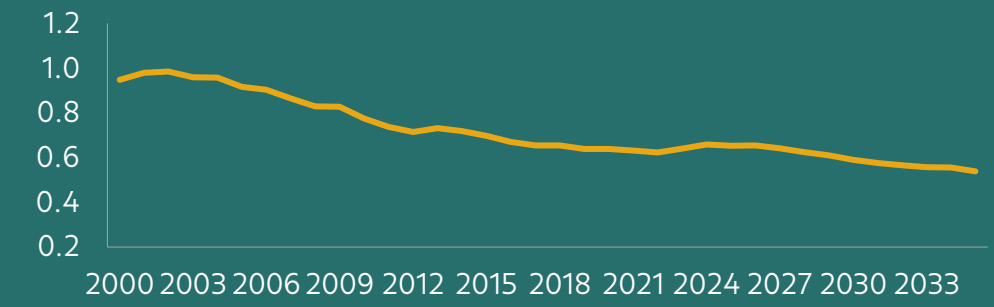


Source: VBM Marketing

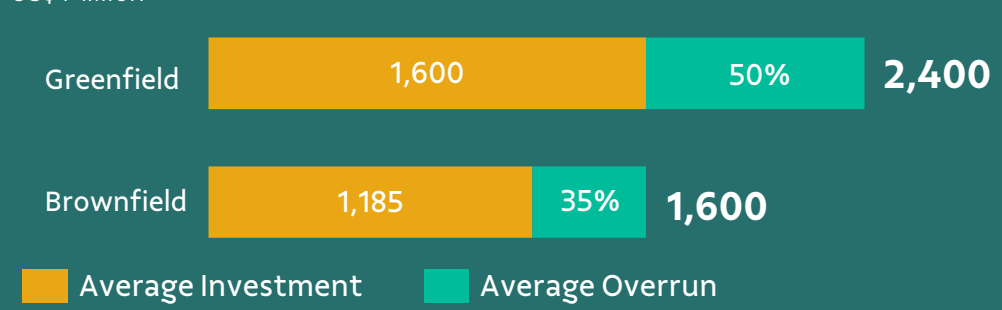
In copper, challenges to supply should persist

Operations and Project Implementation

Declining mill head grades



Historical Capex Overruns



ESG

- Environmental requirements e.g. desalinization and water usage in South America
- Disputes with communities e.g Peru

Regulatory

- Restrictions in natural resources use in Chile
- Resource nationalism and logistical risks in Africa
- Increasing restrictions on mineral exports in Indonesia

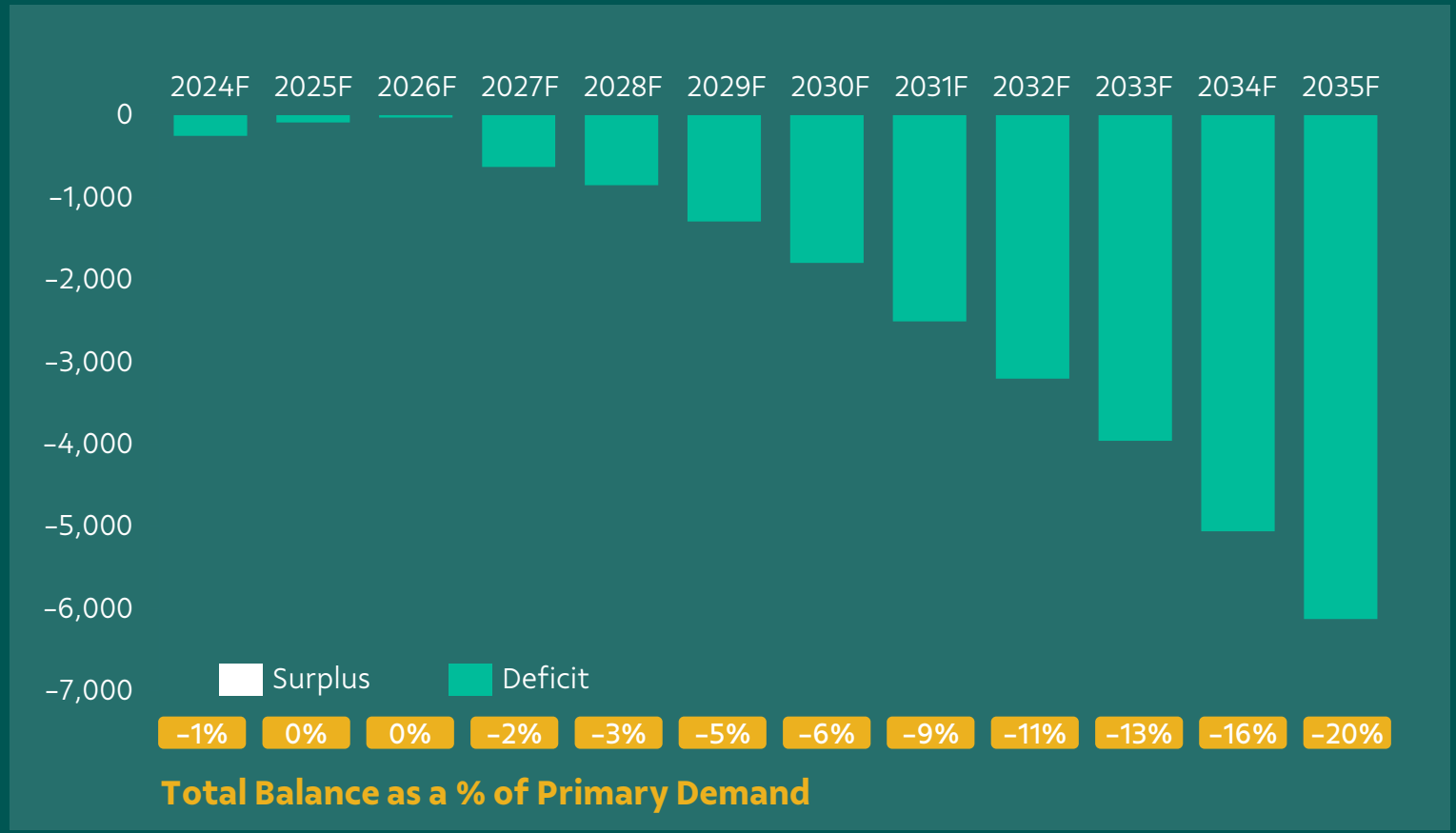
Source: VBM Marketing, CRU.

Structural deficit will require new supply to offset demand growth

- **Lower copper grades**
- **CAPEX overruns**
- **ESG & government pressure**

Market Balance – Primary copper

ktpy Cu

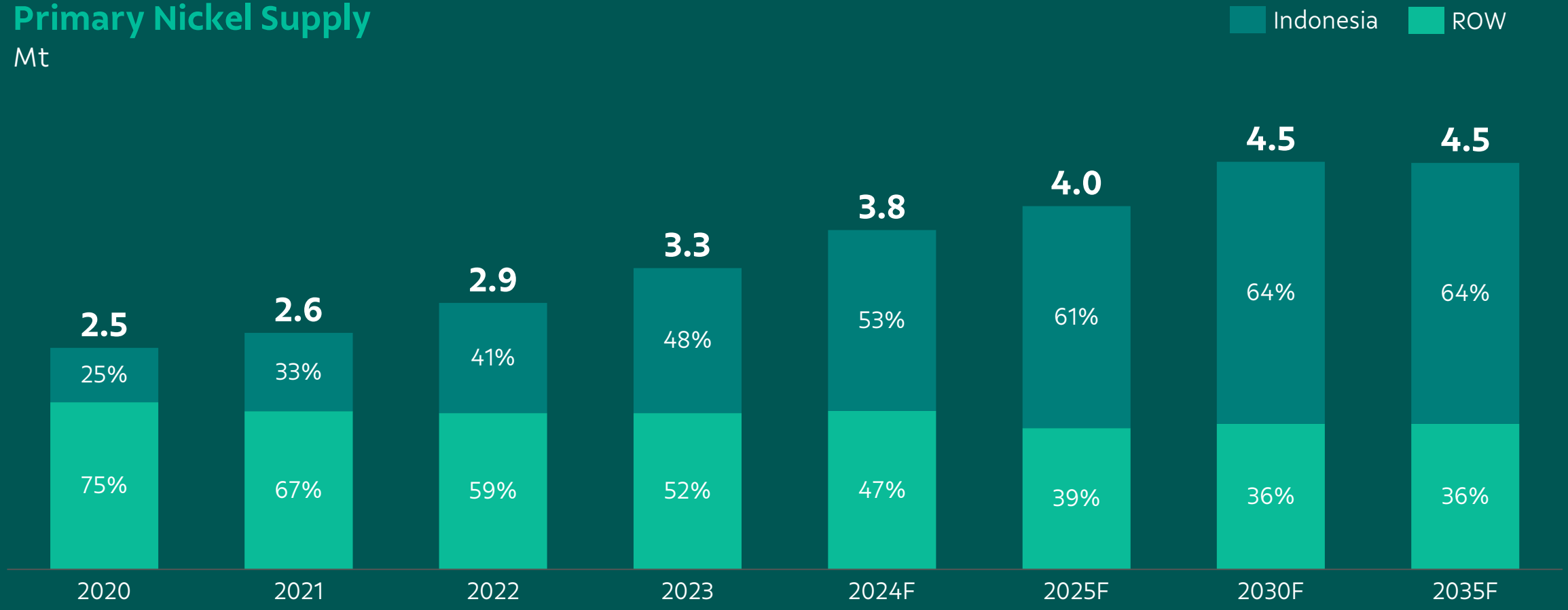


Source: VBM Marketing

In nickel, supply from Indonesia will continue to grow

Primary Nickel Supply

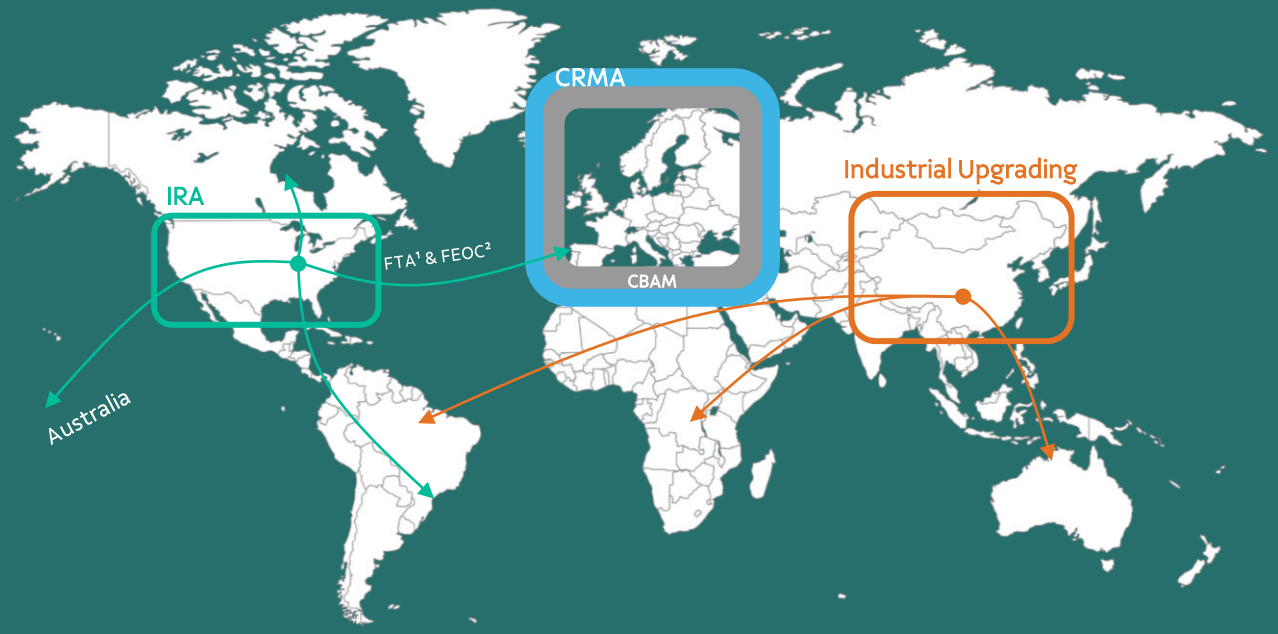
Mt



Source: VBM Marketing

Regional policy and carbon should play a key role in the supply story

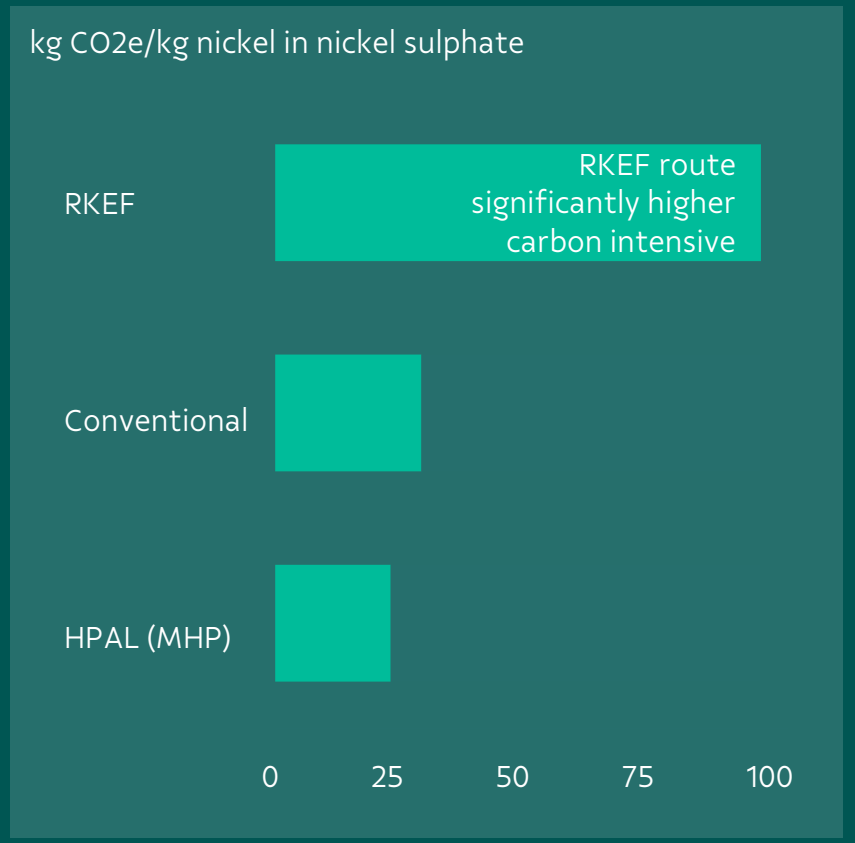
Regionalization



Policy regionalization being used to establish local supply chains

Current Chinese dominance: 84% of the Cathode market share; 82% of the Cell market

Carbon footprint



¹ Free Trade Agreement. ² Foreign Entity Concern.
Source: Benchmark Minerals and Vale Base Metals Marketing

The global EV market will continue to grow, with Ni-rich battery chemistries growing with the West's adoption

Policy support for EVs

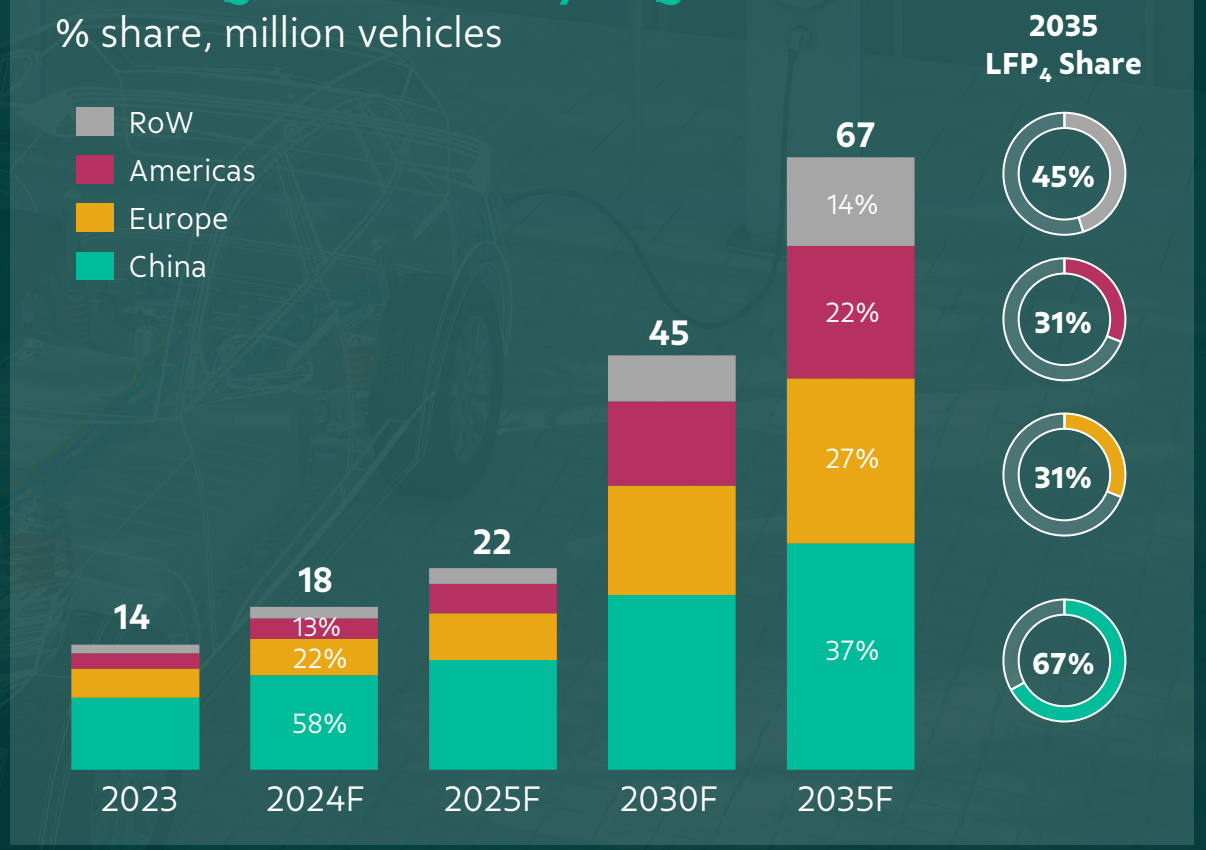
- IRA[1] in the US
- CRMA[2] and CBAM[3] in Europe
- "Future Made in Australia" Act
- Continued subsidy in China

Ni-rich chemistries led by the West

- Higher energy density
- North America and Europe demand higher performance cars
- Various chemistries will be required to satisfy regional consumer preferences

Passenger EV Sales by Region

% share, million vehicles

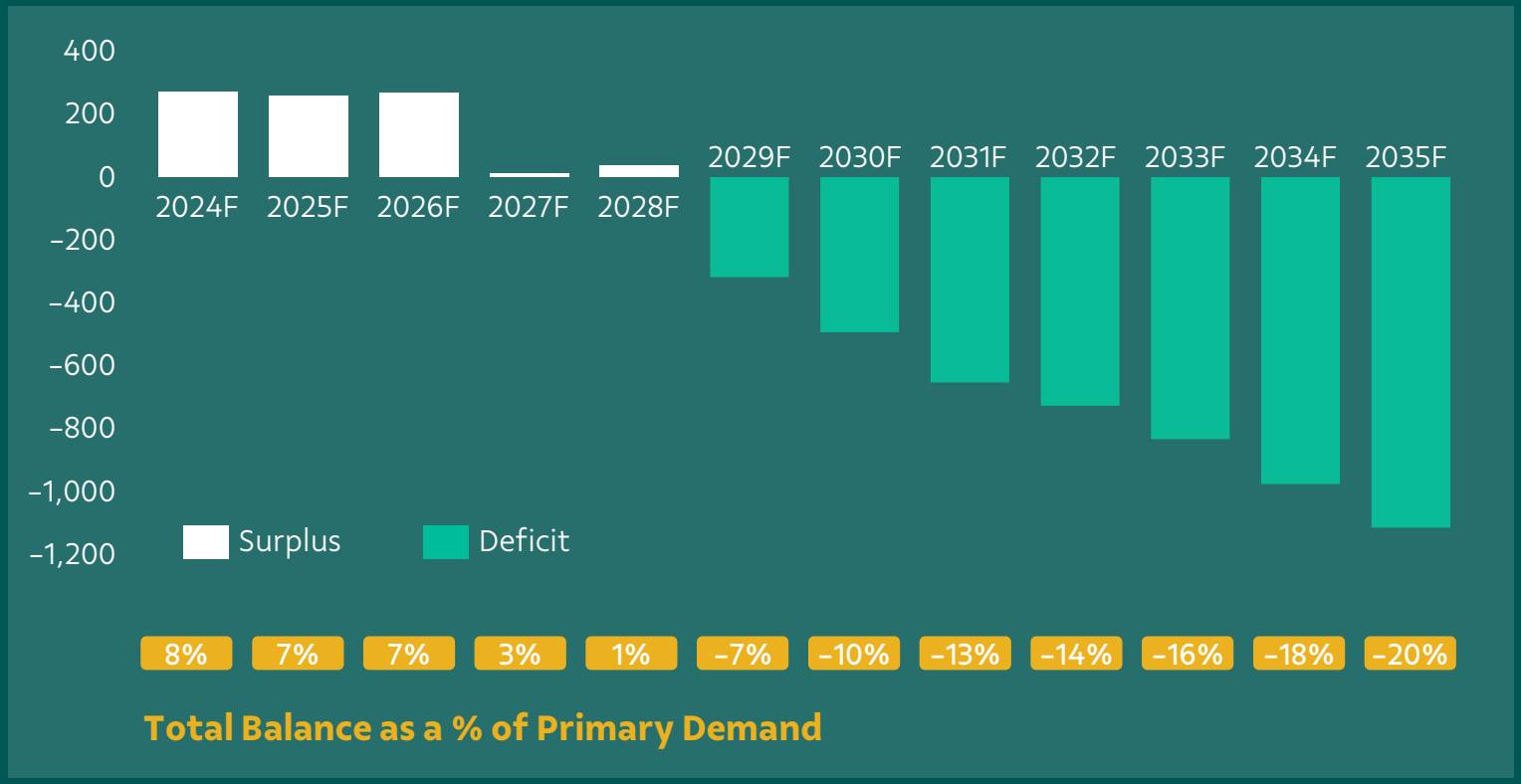


[1] Inflation Reduction Act. [2]Critical Raw Material Act. [3]Carbon Border Adjustment Mechanism. [4] Lithium iron phosphate battery
Source: VBM Marketing

More supply will be required in the long run

Market Balance – Primary nickel

ktpy Ni



With further impacts from ...

- Carbon emissions
- Regionalization of supply chains
- ESG standards

Source: VBM Marketing.

Well-positioned to pivot

Global flowsheet in attractive jurisdictions

Sudbury
Ni pellets, chips and powders
Cu Conc.
Cu cathodes
PGMs
Co rounds

Clydach
Ni pellets, chips and powders

Matsusaka
Tonimet
Ni oxide (flowsheet)

Voiseys' Bay & Long Harbour
Ni rounds
Co rounds

PTVI
Ni matte
(flowsheet)

Onça Puma
FeNi

Sossego and Salobo
Copper conc.

Low CO_2

1st quartile
in CO_2 emissions in **sulphide-based nickel** products [1]

1st quartile
in CO_2 emissions in **laterite-based nickel** products [1]

2nd quartile
in CO_2 emissions for Brazilian **copper concentrate** [1] [2]

Comprehensive review of assets to increase competitiveness and take VBM's asset to their value potential

[1] Data source: 2022 data from Skarn Nickel GHG & Energy Q1 2023 v1.0 06-Apr-2023. Skarn data attempts to normalize data to final product bearing nickel (e.g., refined nickel). Vale operations' data are based on actuals, as calculated by Vale for finished products, comprising Vale's calculated Scope 1 + Scope 2 emissions for integrated operations from mine to refined product. Scope 3 (upstream) is excluded. [2] Refers to Salobo and Sossego

Webinar

Asset Review

Vale Base Metals

Q&A

June 20, 2024

Webinar

Asset Review

Vale Base Metals

Thank You

June 20, 2024