



Autonomous stacker reclaimer in Serra Norte stockyard (March 2022)

# Vale's performance in 1Q22

Rio de Janeiro, April 28, 2022



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Disclaimer



**We are building a  
better Vale**

# Building a better Vale

## De-risking



- Brumadinho
- Mariana
- Dam safety
- Production resumption

## Reshaping



- Focus on core business
- Elimination of cash drains
- Accretive growth opportunities
- Cost efficiency

## Re-rating



- Benchmark in safety
- Best-in-class reliable operator
- Talent-driven organization
- Leader in low carbon mining and ESG practices
- Reference in creating and sharing value

**Sound cash flow generation**

**Discipline in capital allocation**

# Business and financial highlights

Significant milestones achieved and on track to deliver on our strategic and financial objectives

## Iron Ore

- US\$ 9.1/t All-in premium
- Expected improvement in the next quarters to meet 320-335 Mt guidance

## Base Metals

- EV market long-term supply agreement: Northvolt
- Sudbury mines achieving pre-labor disruption run rates

## Portfolio optimization

- Conclusion of Moatize and CSI sale
- Announcement of Midwestern System sale

## Capital allocation

- US\$ 3.5 billion dividends paid
- Strong execution of share buyback program (~100 million shares in 1Q22)
- New program announced (500 million shares)

# Increasing integration between business and ESG strategy

## Investments in decarbonization via Tecnoored



“Green”, low-cost pig iron production, by potentially replacing coal with biocarbon



10-15% lower capital and operational cost-intensity<sup>1</sup>

### Supporting steelmaking decarbonization

- Offer the steelmaking industry a viable technological solution for decarbonization investments, once proved on an industrial scale
- Contribute to Vale’s net Scope 3 emissions reduction target of 15% by 2035



<sup>1</sup> Compared to blast furnace route.

# Making progress on responsible divestments of non-core business

## Goals



*Portfolio Optimization*

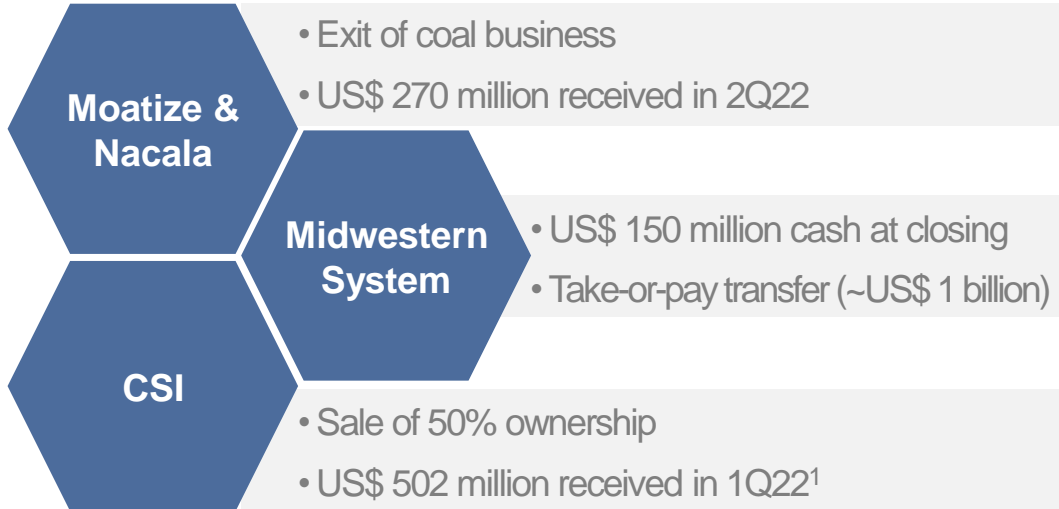


*Solving cash drains*

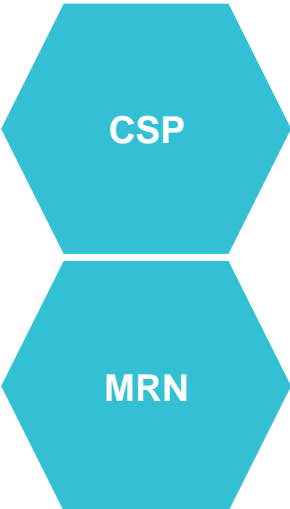


*Focusing on core business*

## Recent divestments



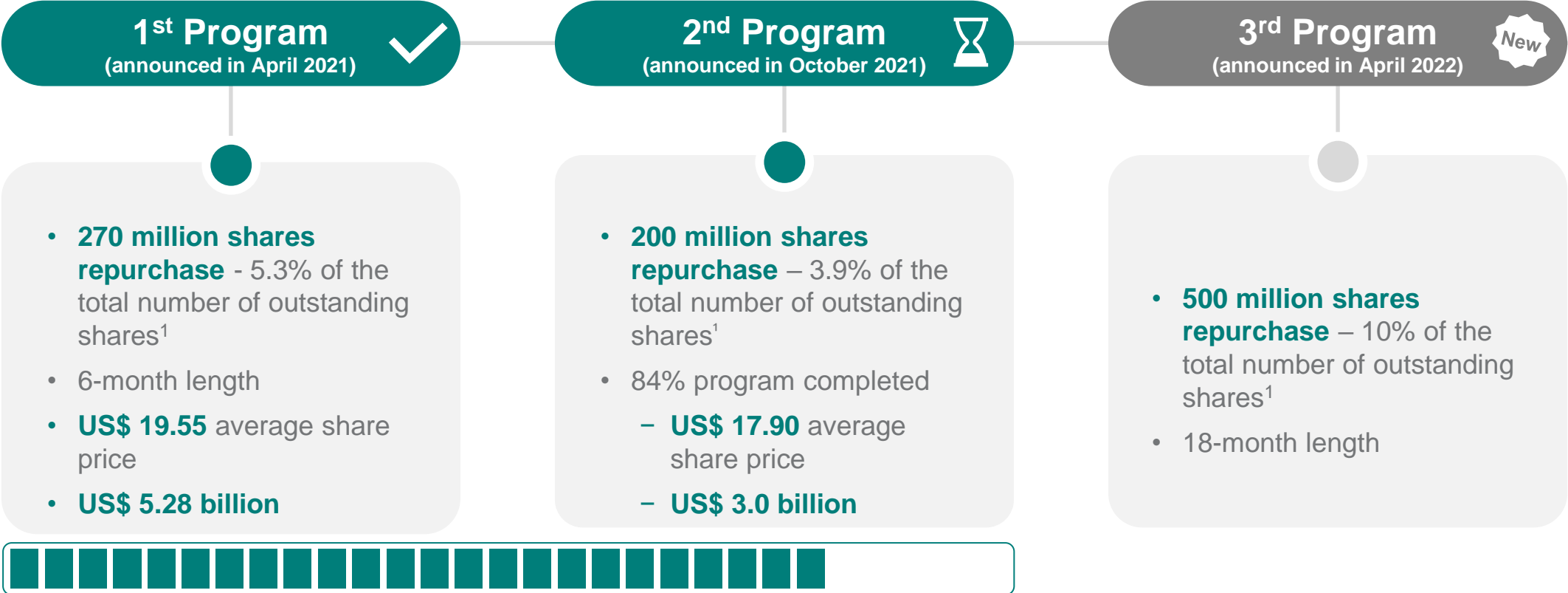
## Upcoming



<sup>1</sup> US\$ 437 million in cash and US\$ 65 million in dividends for 2H21 results.

# Share buyback programs to reach ~20% of outstanding shares<sup>1</sup>

## Share buyback programs since 2019



**1<sup>st</sup> Program**  
(announced in April 2021) ✓

- **270 million shares repurchase** - 5.3% of the total number of outstanding shares<sup>1</sup>
- 6-month length
- **US\$ 19.55** average share price
- **US\$ 5.28 billion**

**2<sup>nd</sup> Program**  
(announced in October 2021) ⌚

- **200 million shares repurchase** – 3.9% of the total number of outstanding shares<sup>1</sup>
- 84% program completed
  - **US\$ 17.90** average share price
  - **US\$ 3.0 billion**

**3<sup>rd</sup> Program**  
(announced in April 2022) ★ New

- **500 million shares repurchase** – 10% of the total number of outstanding shares<sup>1</sup>
- 18-month length



+90% of ~9.2% complete...

<sup>1</sup> As of March 2021 (5,130,801,436 shares).



2

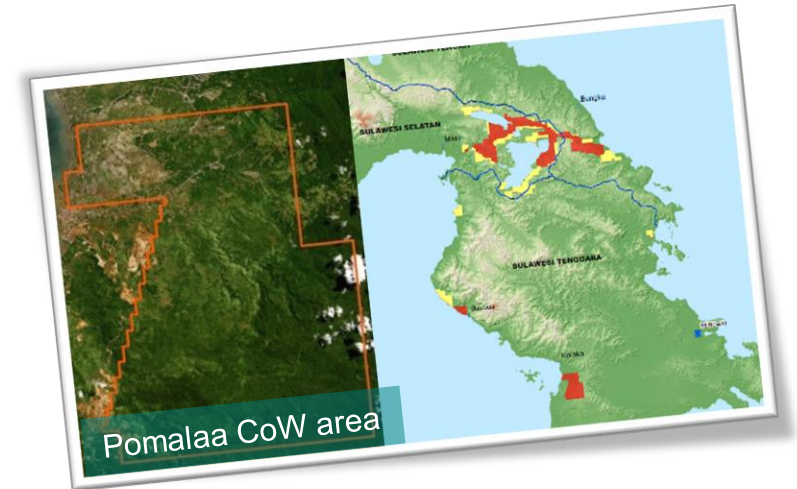
**Base Metals**

# We continue to advance in our Base Metals agenda

- 1 Benchmark in Safety & Sustainability**  
*Core value within Vale, an uncompromising commitment*
- 2 Achieving our Full Resource Potential**  
*World class resource base in key global regions*
- 3 Delivering Project Pipeline**  
*Robust suite of projects to deliver long term value*
- 4 Mine Productivity & Performance**  
*Leading from our mine face to safely deliver value*
- 5 Foundational Major Player in North American EV Industry**  
*Positioned to be a leading North American based provider of critical metals*
- 6 New Pact with Society**  
*A low carbon, responsible company that differentiates from the pack*



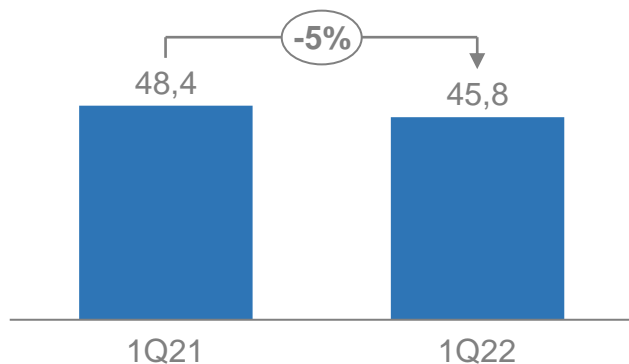
- Announced an agreement to sell our low-carbon nickel products to battery manufacturer Northvolt
- Certificate for carbon footprint of:
  - Nickel pellets from Sudbury and Clydach
  - Nickel powder from Sudbury
  - Copper concentrates from Salobo and Sudbury mines



- Non-binding framework agreement between PTVI and Huayao to develop an HPAL project in Pomalaa
- Targeted production scale: up to 120 ktpy of nickel in MHP
- PTVI will own 100% the mine and have the right to acquire up to 30% of the HPAL project

# Production impacted by ramp-up of Sudbury mines, including Totten resumption, ramp-up of VBME and maintenance at Sossego and Salobo

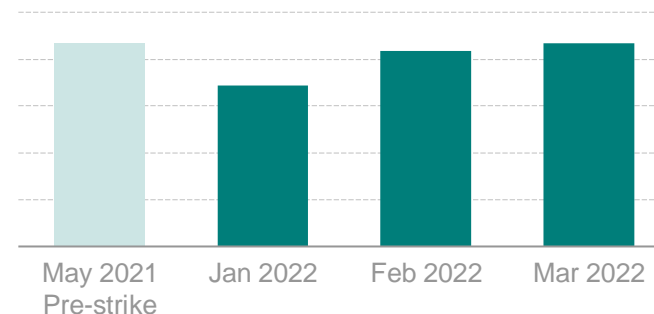
Nickel production - kt



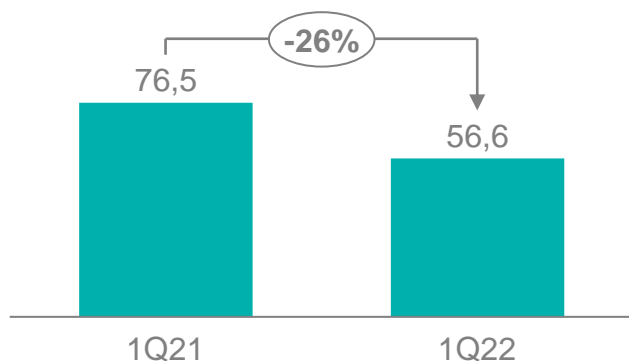
■ Sudbury mines achieving pre-labor disruption run rates

- Totten reaching pre-incident rates
- Stable performance in Onça Puma
- Planned maintenance in Matsusaka
- Increase in third-party sourced feed to maximize downstream utilization
- Ramp-up of VBME project

Sudbury mine performance  
tonnes of ore mined – daily average



Copper production - kt



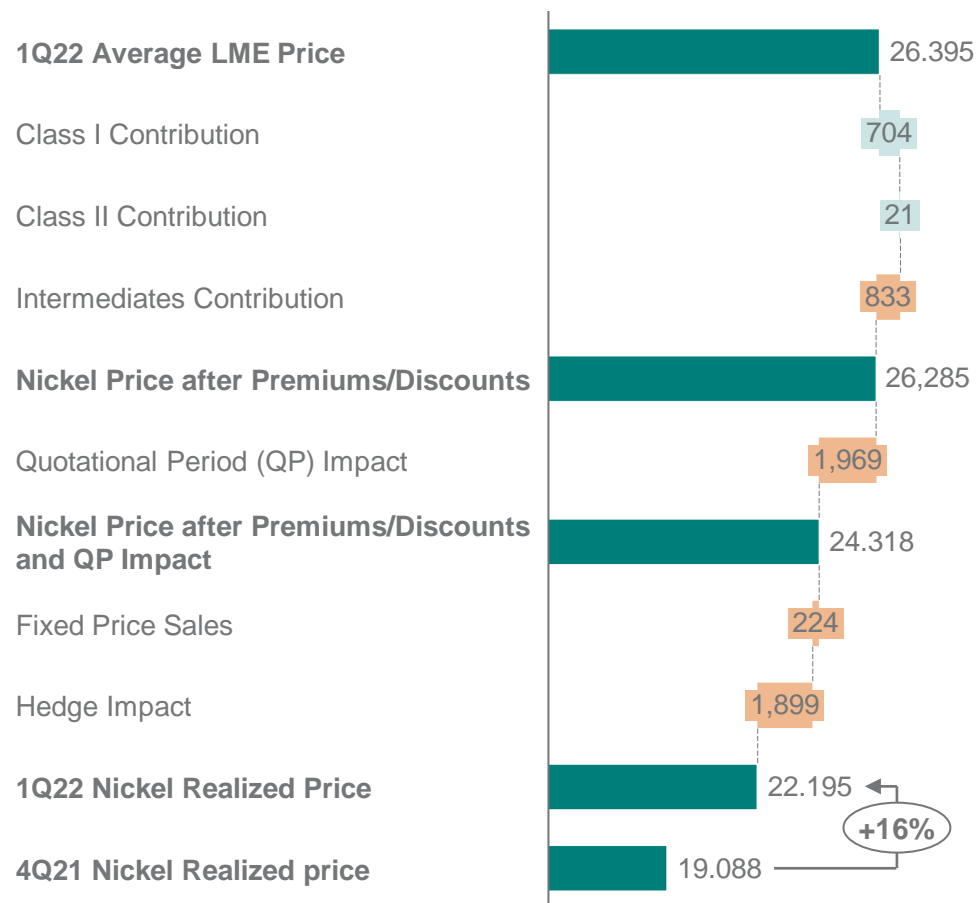
- Sossego SAG mill maintenance extended
- Maintenance on Salobo's mill liners and impact of heavy rains on mine plan
- Lower by-products from Canadian operations

▶ Mining ahead of plan allowing plant to work with maximum throughput after maintenance

▶ Drawdown of maintenance backlog and higher grades zone to be mined in 2H22

▶ Mining production increased in Sudbury - pre-strike levels

# Ni price realization was 16% up in the quarter



## Product Premiums and Discounts

Category	Volume (kt Ni)	Average Premium (\$/t) <sup>1</sup>
Upper Class I	20	1,250
Lower Class I	5	550
Class II	9	90
Intermediates <sup>2</sup>	5	(6,480)

## Market Pricing

QP Exposure	Previous Period	Current Period
Typical Monthly QP Split	~50%	~50%

## Hedge Impact

Category	Volume (kt Ni)	Nickel Price (\$/t)
Hedge Impact	12.3	20,340 <sup>3</sup>

- Not subject to margin call
- Volumes spread along 2022
- No volatility in earnings due to hedge accounting

<sup>1</sup> Average premium is rounded to nearest 5

<sup>2</sup> Intermediates mostly refers to PTVI matte, which is typically sold at a percentage of LME price

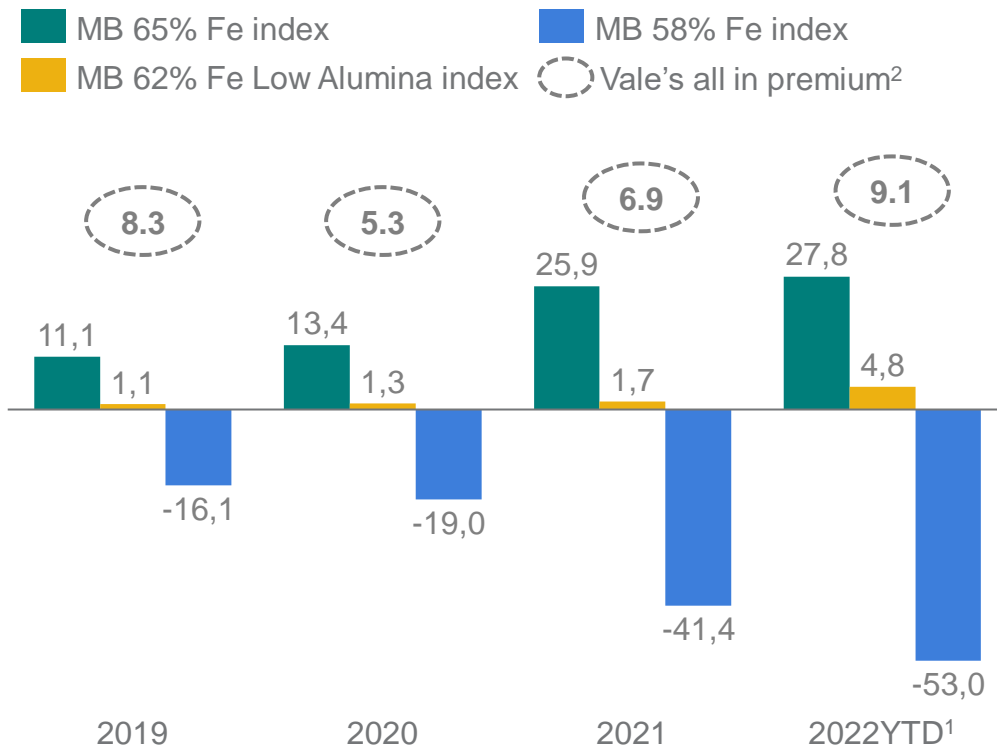
<sup>3</sup> Refers to average settlement price in the quarter

3

**Iron Ore**

# Vale's product portfolio premiums widened in Q1

Average spread to IODEX 62% (US\$/dmt)



## Long term drivers: Greener steelmaking

- Investment requirement for steelmakers
- Higher reductant costs
- Limited supply of high-quality ores



## Short term drivers: Supply chain disruptions

- High coke costs
- Concentrates restrictions
- Peers' replacement and disruptions in Brazil



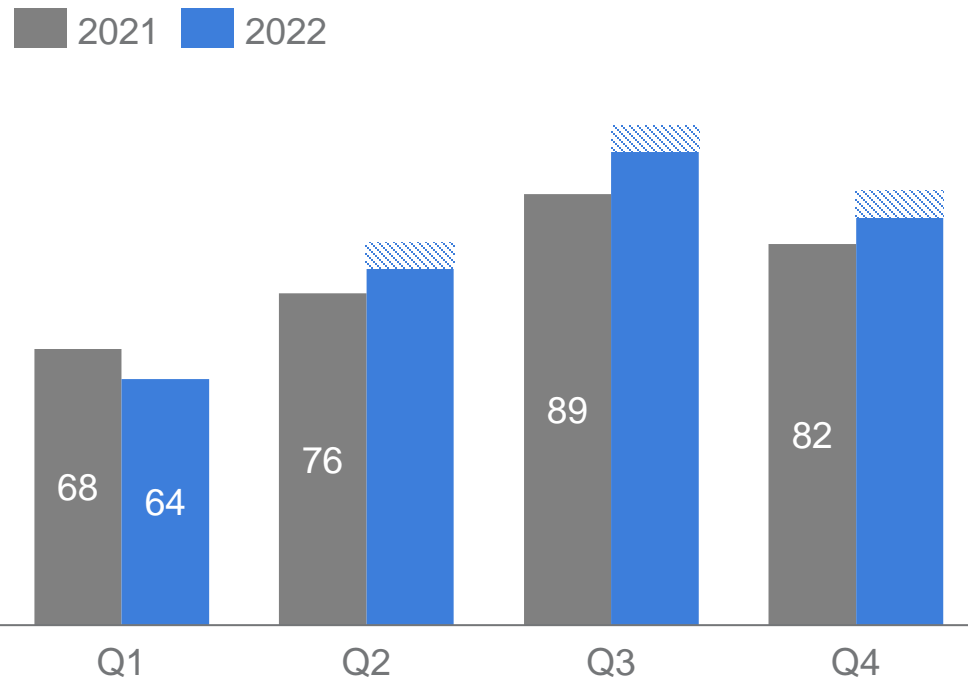
Vale is improving its premium portfolio (e.g. tailings filtration plants, IOCJ, concentration plants)

<sup>1</sup> Until April 25<sup>th</sup> 2022.

<sup>2</sup> 2019 and 2020 figures Include Midwestern System.

# We are confident to achieve the of 320-335 Mt production guidance in 2022

## Iron ore production (Mt)<sup>1</sup>



## Growth enablers

2Q22

- Minas Gerais April's production 30% higher MTD<sup>2</sup>: +2.1 Mt YoY.
- S11D: jaspilite crushers installation concluded (production level increase).
- Tailings filtration plants under commissioning (quality improvement)

2H22

- Major maintenances carried out in 1H22
- Dry weather seasonality
- Serra Norte: rolling licenses and Gelado project start-up

<sup>1</sup> Including Midwestern System production. <sup>2</sup> Until April 25<sup>th</sup> 2022.

# Making progress to deliver medium to long term production targets



## Serra Norte

- **Gelado project start-up** in 2H22
- Applying for **rolling licenses** to increase 2H22 production
- **New ore bodies under licensing** with further development (N3 and N1/N2)



## S11D

- Improved **ore body knowledge** and **new asset learning curve**
- **Medium term solutions under development:** New waste crusher to process large compact blocks, +10 Mtpy and Serra Sul 120 projects



## Itabira

- **Tailings filtration plants** ramping-up
- **Itabiruçu dam started raising works** in April (first phase to be completed by year end and final phase in 2023)



## Brucutu

- **Tailings filtration plant** ramping-up
- **Torto dam being concluded in 2Q22** and under licensing process until 4Q22
- **Licensing and development of tailings/waste stockpiles** areas



4

**1Q22 highlights**

# Seasonally lower volumes offset by higher prices and premiums

EBITDA variation – US\$ million (1Q22 x 4Q21)



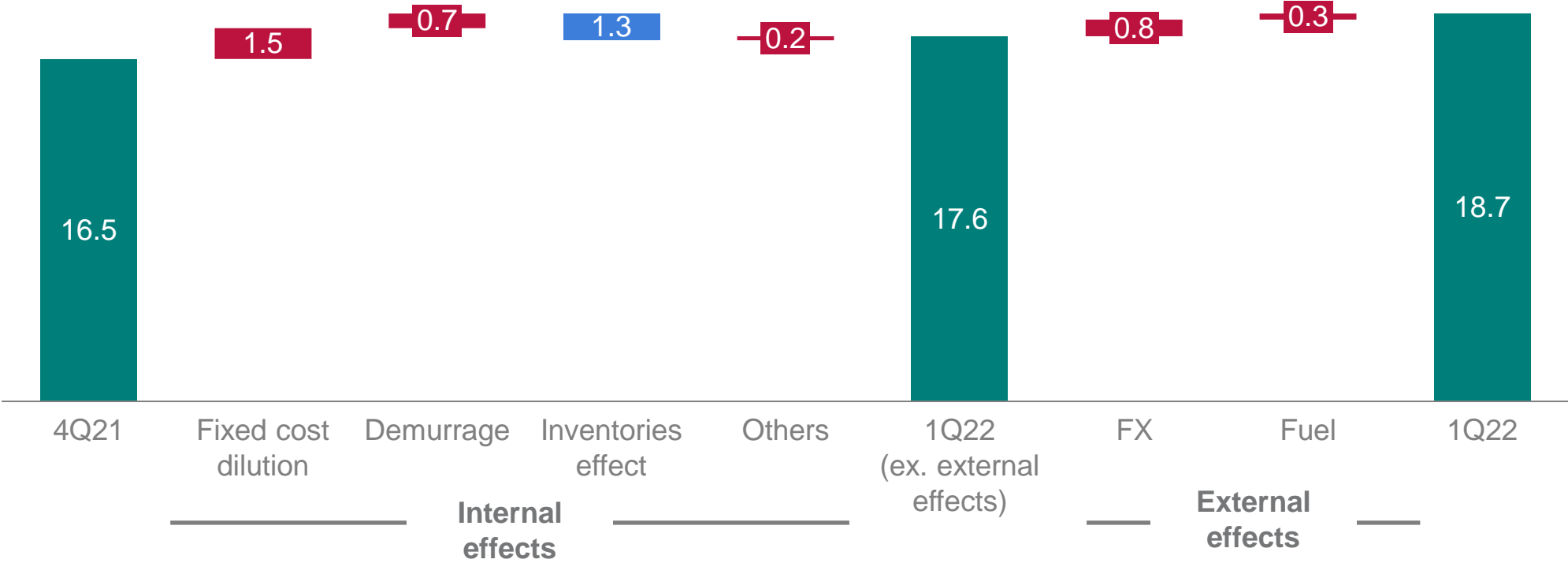
<sup>1</sup> Proforma EBITDA from continuing operations.

<sup>2</sup> Includes the impact of third-party purchase, royalties, distribution center, and leasing.

<sup>3</sup> Includes costs and expenses, the impact of trading operations, the impact of by-products, and others.

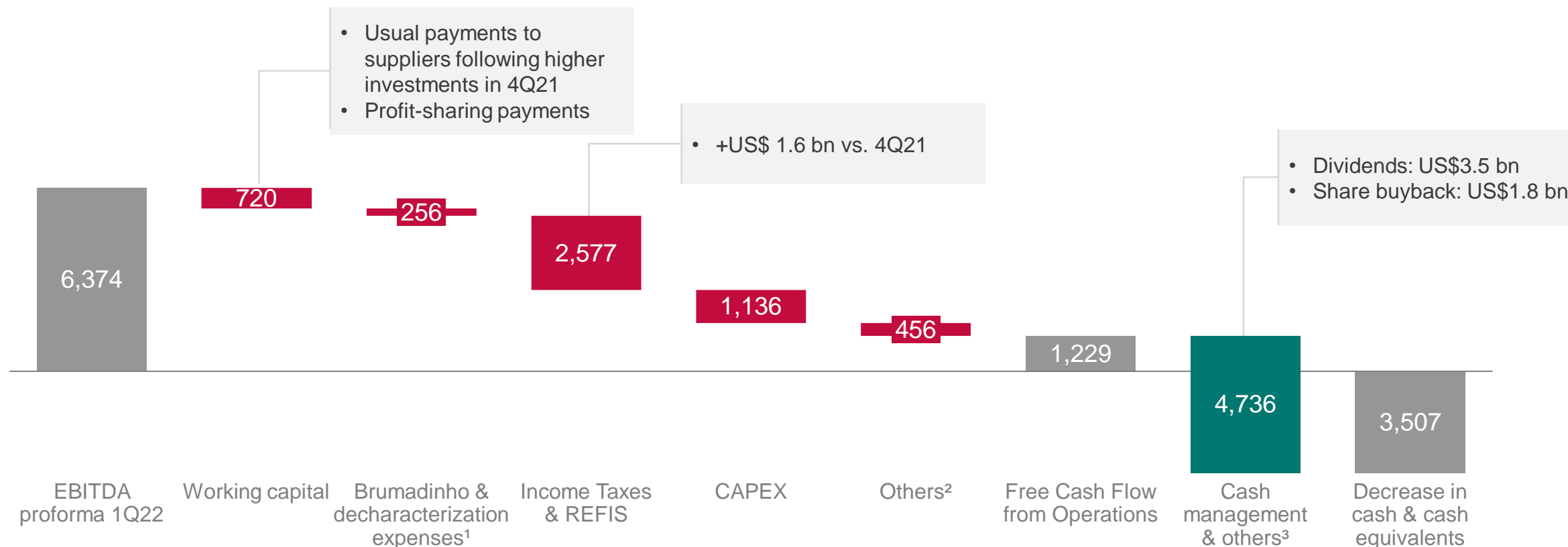
# C1 mainly impacted by lower volume, FX and fuel prices

C1 cash cost ex-third-party purchase (US\$/t)



# Vale distributed US\$ 3.5 billion to shareholders and repurchased US\$ 1.8 billion of its shares

## Free cash flow (US\$ million)



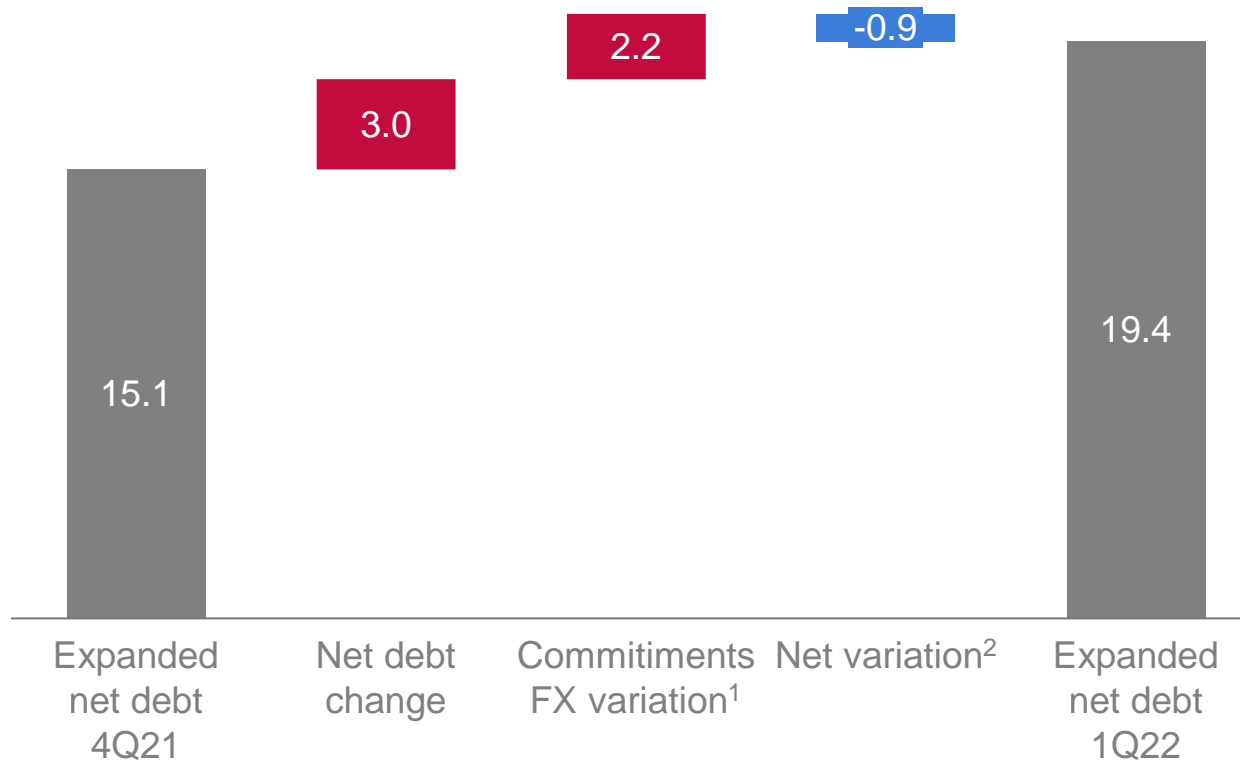
<sup>1</sup> Includes US\$ 133 million of disbursement of Brumadinho provisioned expenses, US\$ 123 million of Brumadinho incurred expenses.

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

<sup>3</sup> Includes US\$ 3.480 billion of shareholder remuneration, US\$ 1.788 billion of share buyback, US\$ 502 million from the sale of the participation in CSI, US\$ 425 million of debt funding, and US\$ 395 million of debt repayment.

# Optimal leverage was reviewed to US\$ 10 - 20 billion range

Expanded net debt (US\$ billion)



Key enablers to support US\$ 10-20 bn range



<sup>1</sup> Includes Refis, Brumadinho provisions, De-characterization provisions, Samarco & Renova Foudation provisions.

<sup>2</sup> Includes currency swaps, Refis, Brumadinho provisions, De-characterization provisions, Samarco & Renova Foudation provisions.

# Closing remarks

**Remain laser-focused on delivering on our strategic & financial objectives**

**Uniquely positioned to lead the sector towards higher ESG standards**

**Confident on achieving our production targets for the year**

**Capital discipline and superior return to shareholders to remain a priority**