

# CSN DAY | 2023

C MIN





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CMIN

## Mining

Eneas Garcia Diniz, Superintendent Director  
Pedro Oliva, CFO and IR Executive Director

## TOTAL ORE HANDLING

It has already surpassed  
the 2022 record

## IRON ORE PURCHASES

Already surpassed the  
previous annual record  
of 2013 (10.8Mt)

# OPERATIONAL EXCELLENCE

**2023**

A YEAR OF OPERATIONAL RECORD



## TOTAL SALES

Already exceeded the  
previous record of 38.2Mt  
in 2019

## PRODUCTION + PURCHASES

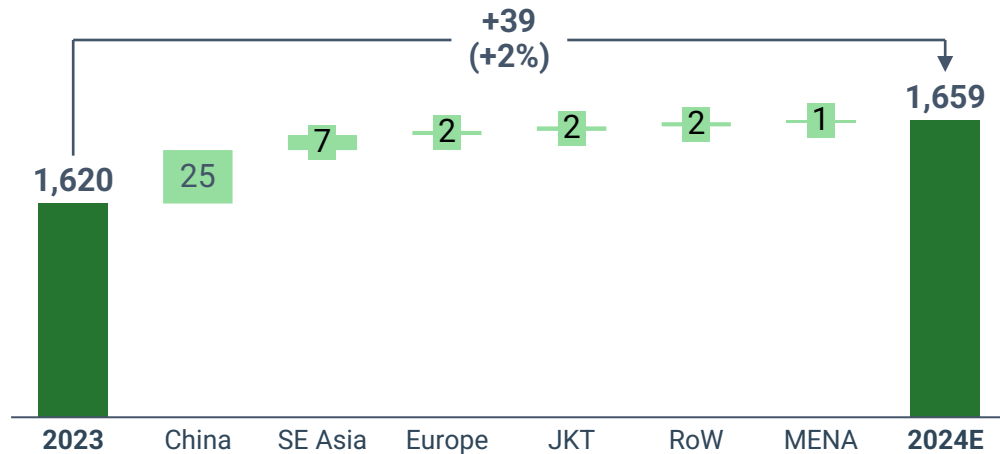
42-42.5 Mtpy guidance  
(previous record of 36.2Mt  
in 2021)



# Iron Ore 2024

SEABORNE MARKET WITH DEFICIT TENDENCY IN 2024 SUPPORTED BY A STRONG DEMAND IN CHINA

Seaborne Iron Ore Demand (Mt)

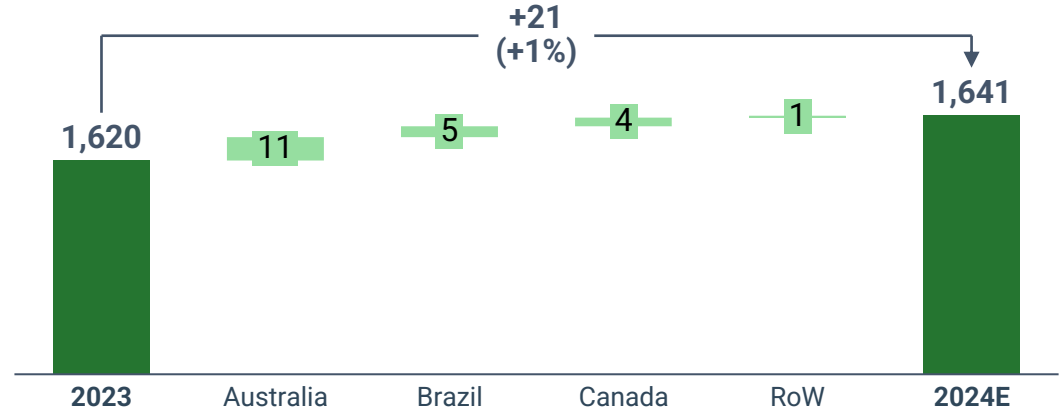


**CHINA:** Infrastructure investments boosted by a 1 trillion RMB package, as well as stocks normalization.

**SE ASIA:** Increase in GDP and industrial production, above the world's average, gives support to a strong demand for iron ore.

**JKT AND EUROPE:** After 2 Years of low activity, it's expected a movement to resume production in the second semester of 2024.

Seaborne Iron Ore Offer (Mt)



**AUSTRALIA:** The ramp up of FMG and Rio Tinto's projects will boost volumes in 2024.

**BRAZIL:** Growth in CMINs production and expectation for increased volumes from Junior Miners.

**CANADA:** Overcoming of operational problems and projects in rump up phase (Rio Tinto/Champion Iron).

# The Chinese Market in 2024

CORRECTION IN IRON ORE INVENTORIES AND INCENTIVES TO INFRASTRUCTURE PROJECTS CREATE A SCENARIO OF INCREASING DEMAND FOR 2024

Qingdao Port, China



Blast Furnace utilization rate in 89% (Jan-Nov/23) is the highest for the past 3 Years.



Total inventories reached historical minimal levels in 2023.



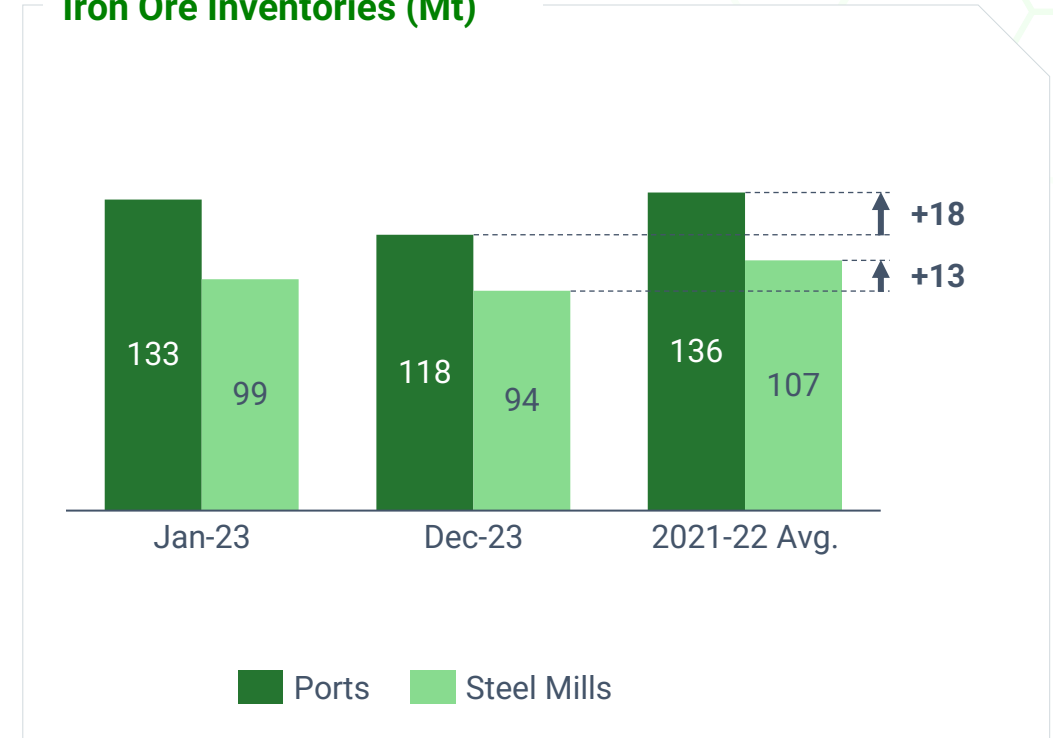
1 trillion RMB incentives destined to infrastructure (+7 to 12Mt of steel).



Expectations of more investments to boot the property market and industry.

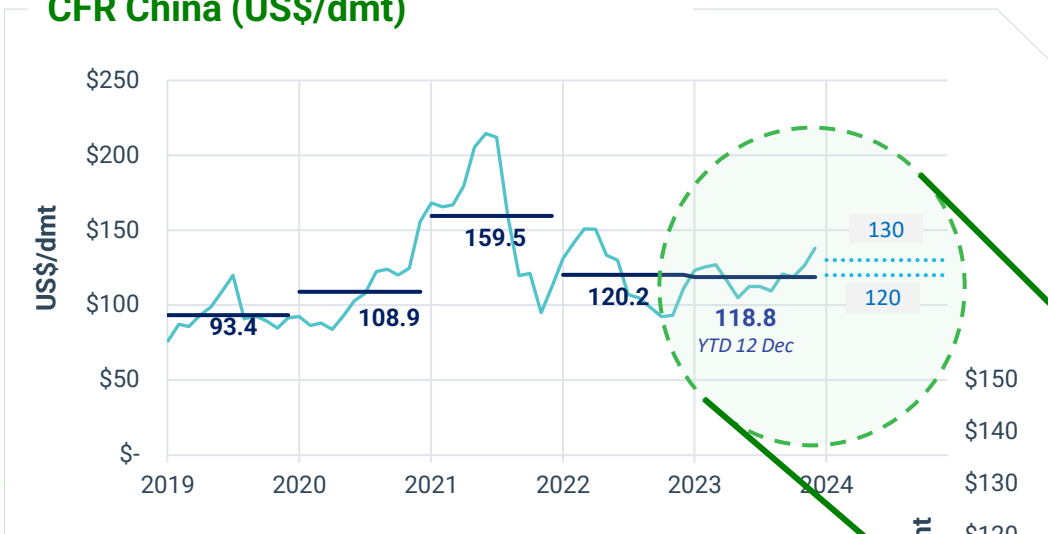
Image: Seatrade Maritime

Iron Ore Inventories (Mt)

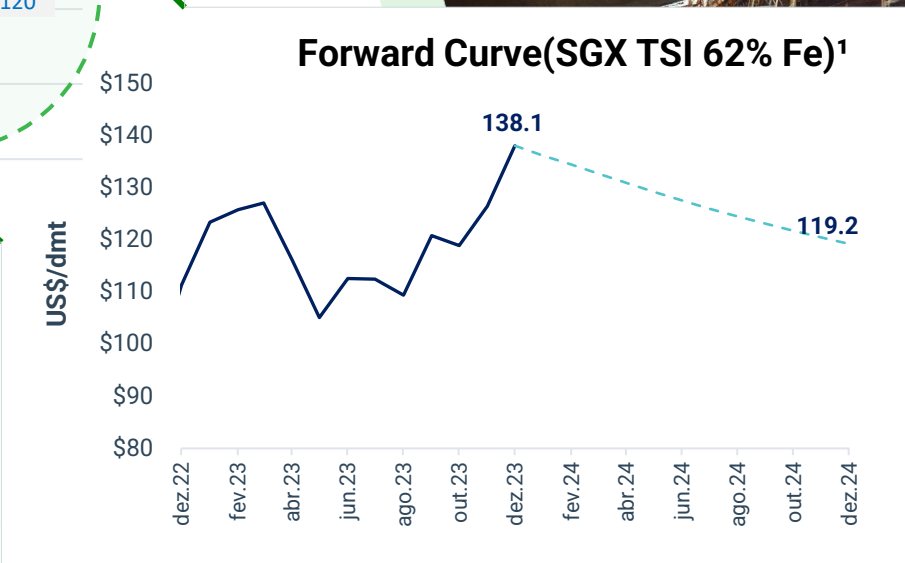


# 2023 Prices

**Iron Ore Prices Evolution - 62% Fe  
CFR China (US\$/dmt)**



**Forward Curve(SGX TSI 62% Fe)<sup>1</sup>**

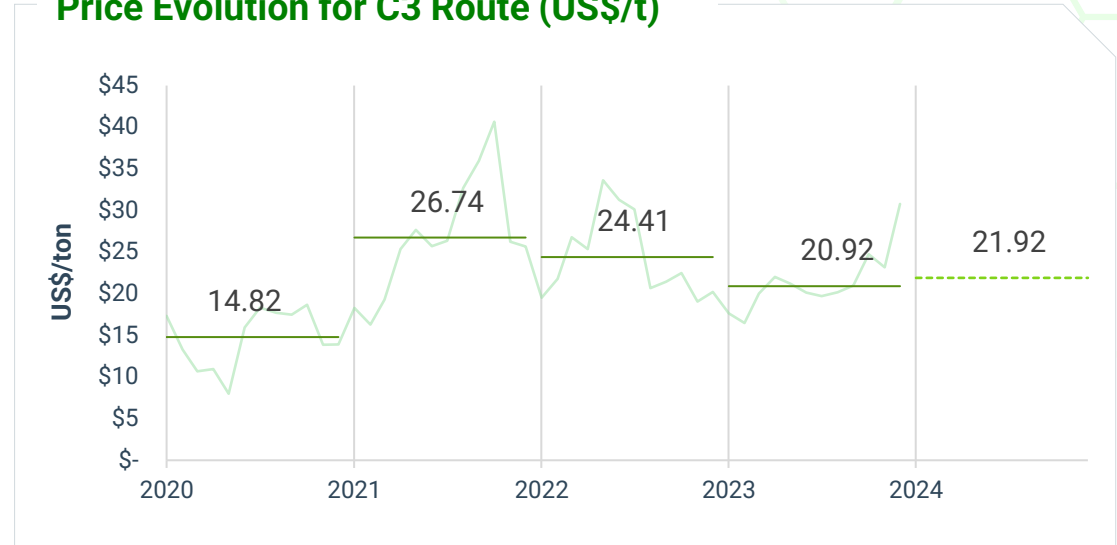


Sources: Platts, SGX e company internal analysis  
<sup>1</sup>on December 12th, 2023



# Sea Freight

Price Evolution for C3 Route (US\$/t)



- 

Low fleet growth and increase in bauxite volumes for the next years may contribute to support freight prices and volatility in a short term.
- 

CSN is now negotiating mid and long term COAs in order to reduce its exposure to maritime.
- 

Porto de Itaguaí's dredge to increase draft will allow vessels to load bigger volumes from 2H 2024 on, reducing freight costs in ~US\$0.80/ton.



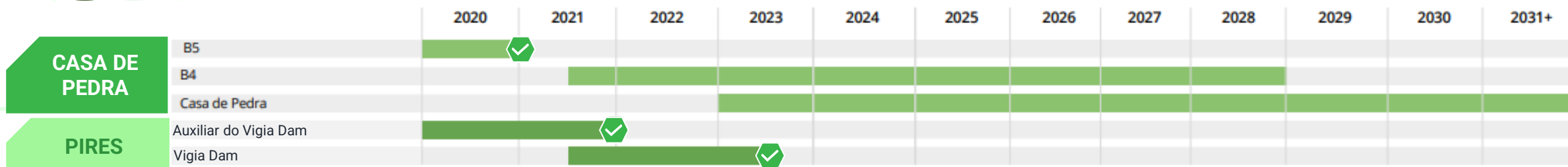


# Tailing and Dams Management

## 2023 MAIN ADVANCES

- All **declaration of stability from CSN Mineração** were renewed in September by an independent audit
- Completion of the de-characterization work** of Vigia tailing dam
- Hiring of engineering team to study the **de-characterization of Casa de Pedra tailing dam**

### De-characterization Schedule



External audits twice a year

Cross-validation of audits and projects

Advancement on tailings reprocessing projects

**Track-record:** zero accidents in our dams



# Operational Resilience: Adaptation and risk mitigation

ENHANCEMENT IN THE RAIN PLAN REDUCES THE RISK OF IMPACT DURING THE PEAK OF RAINFALL.

## Mining



- Enhancement of mining plan and mine drainage
- Larger stocks near production plants to avoid disruptions on heavy rain days.

## Transport



- Inspections, monitoring and prevention of accidents in the railway
- Continuous diagnostic engineering for prevention of significant impact

## Handling and Port



- Forced drainage and dewatering agent aiming to reducing iron ore moisture
- Storage of low-moisture products for blending
- Simulator and rate adjustment by product type.

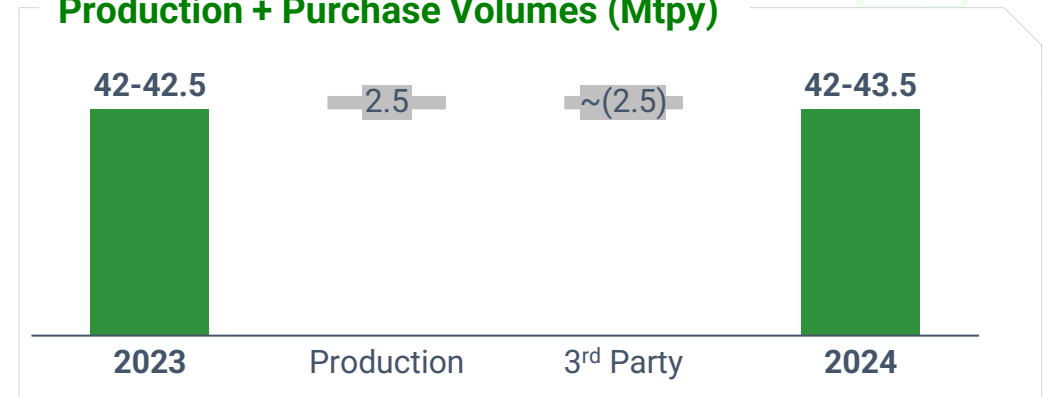




# 2023 vs 2024 Volumes

MIX IMPROVEMENT AND DISCIPLINE IN THIRD-PARTY PURCHASES RESULT IN BETTER MARGINS

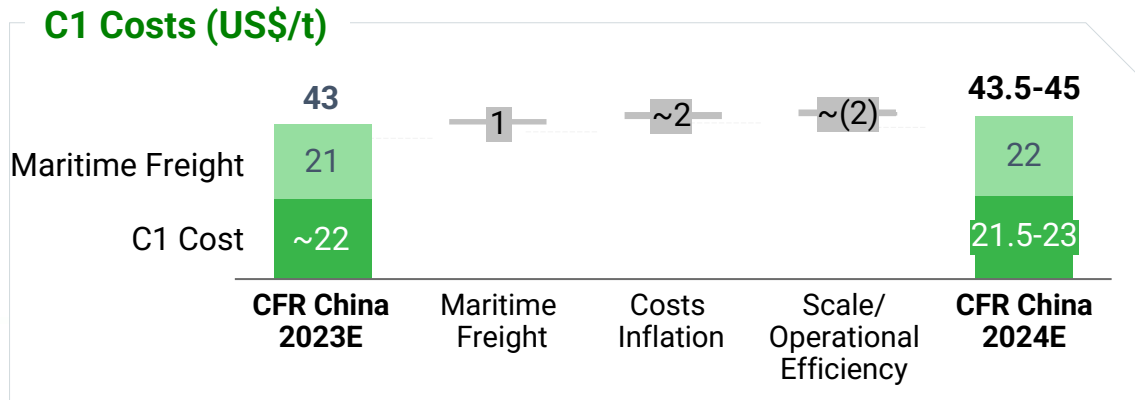
Production + Purchase Volumes (Mtpy)



- MIX:** Mix improvement through increased in-house production and reduced third-party purchases.
- SALES VOLUME:** A potential reduction in inventory of up to ~1.5Mt will support the sales volume.
- THIRD-PARTY PURCHASES:** Prioritization of unit margin with a higher absolute result despite the lower volume
- QUALITY:** Low margins in Chinese steel mills continue to favor the low-grade ores.

# CFR China Costs

ENHANCEMENT IN OPERATIONAL RESILIENCE AND LOGISTIC COST PRESSURE

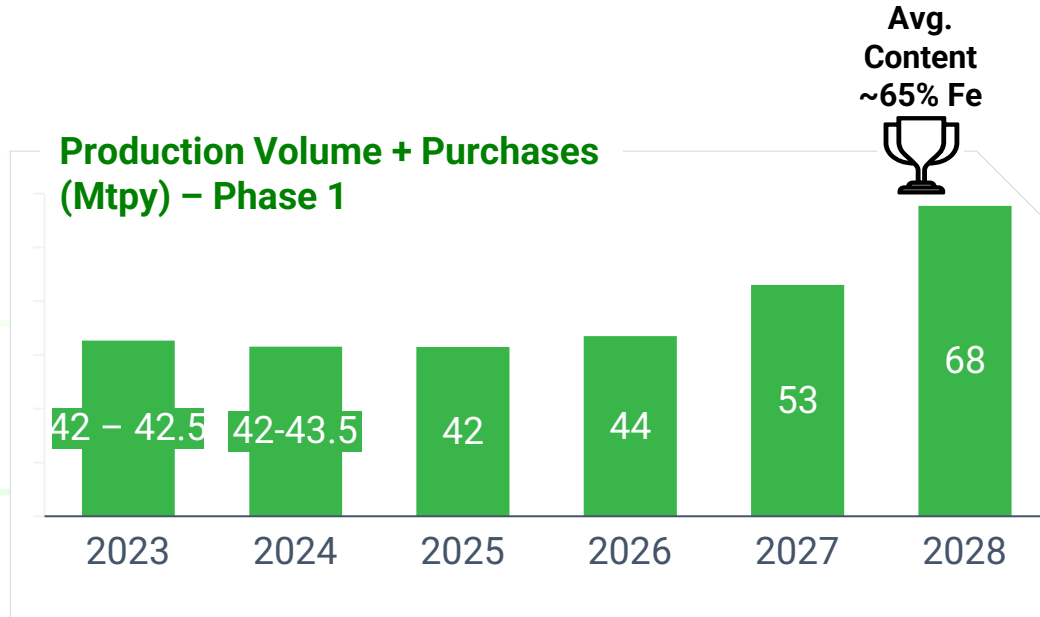


- 1 Inflation in logistic costs (maritime, diesel, and railway) and the pursuit of greater operational resilience.
- 2 Higher production volume and increased operational efficiency contribute to cost reduction
- 3 A combination of C1 in line with 2023 and a mix improvement will result in a more competitive COGS next year and better margins.



# Expansion Projects Update – Phase 1

PHASE 1 EXPANSION WILL RESULT IN THE ADDITION OF 28.4MTPY AND AN AVERAGE QUALITY OF APPROXIMATELY 65% FE BY 2028.



**R\$15.3 Billion Investment**  
Average of R\$3.0 Billion/year

<p><b>Itabirite P15</b> 16.5 Mtpy 67% Fe Startup: 1Q27</p>	<p><b>Ultra fines Rec.</b> 1.0 Mtpy 66% Fe Startup: 4Q25</p>	<p><b>Pires Tailing Rec.</b> 1.5 Mtpy 65% Fe Startup: 2Q26</p>	
<p>2.5 Mtpy 67% Fe Startup: 3Q26</p> <p><b>B4 Tailing Rec.</b></p>	<p>2.5 Mtpy 67% Fe Startup: 2Q28</p> <p><b>Casa de Pedra Tailing Rec.</b></p>	<p>4.4 Mtpy 65% Fe Startup: 1Q28</p> <p><b>Itabirite P4+</b></p>	<p>From 45 Mtpy to 60 Mtpy</p> <p><b>Tecar Expansion</b></p>

**Total Projects Volume of 28.4Mt**

# EXPANSION PROJECTS UPTADE

HIRING DISCIPLINE HAS LED TO UPDATES IN SCHEDULE AND CAPEX

PRIORIZATION OF P15 AND PROJECTS RELATED TO TAILINGS/DAM DE-CHARACTERIZATION

## Ultra fines

Detailed engineering in progress and negotiation of the key equipment package

## CMAI Pires

Basic engineering in progress

## CMAI B4/CDP

- Basic engineering concluded (B4)
- Initiation of drilling and advancement of mineralogical characterization and process route (CdP)

## P4+

With the advancement of studies, the company is considering the possibility of expanding the capacity of this project, aiming for greater scale and profitability

## Port 60mtpy

- Progress in infrastructure work
- Finalizing the contract for the construction for the pier expansion
- Detailed engineering of railway lines in negotiation

# Itabirite Plant P15



## MAIN MILESTONES

99%  
 Manufacturing Package 1 equipment

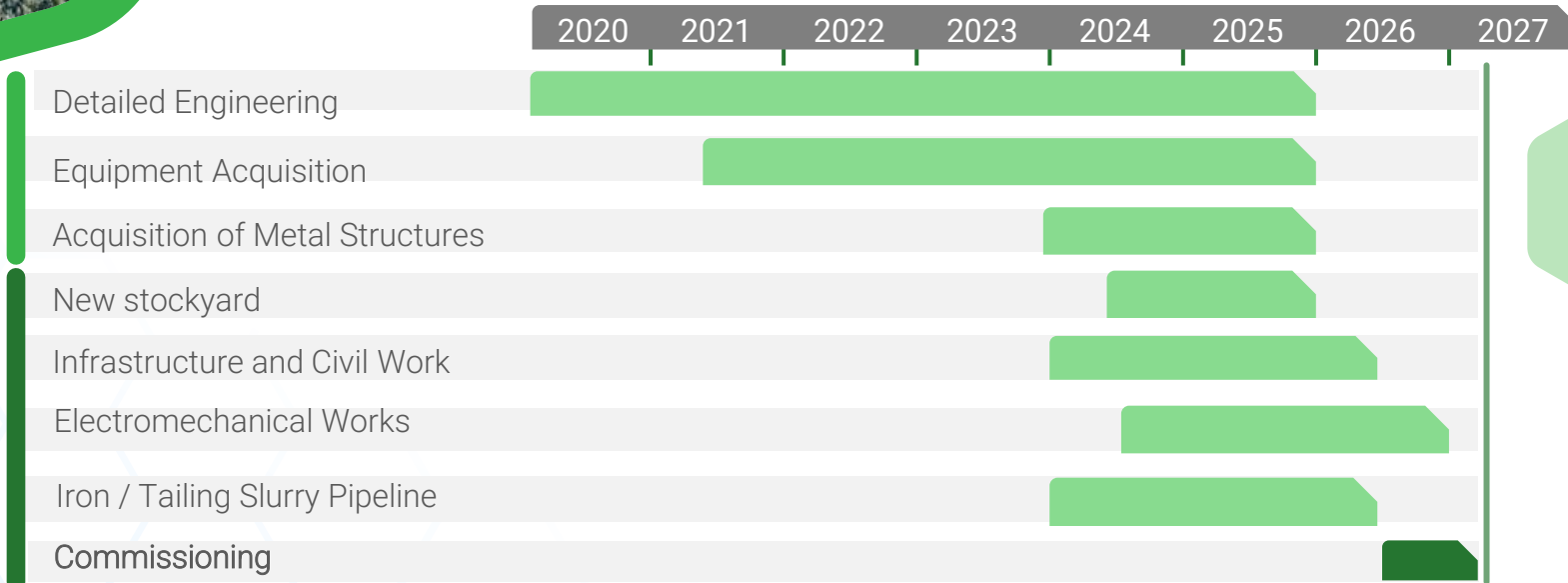
99%  
 Gas Station Relocation – Package 1

25%  
**Physical progress of the project**

### Others:

- **Machine shop relocation:** 61%
- **Vegetation Suppression:** 75%
- **Packages Acquisition:** Equipment Package 2, Infrastructure, and Electrical/Automation

## Project Schedule



1Q27  
 start-up

**R\$4 Billions**  
 Potential EBITDA<sup>1</sup>

<sup>1</sup>Considers long-term normalized assumptions

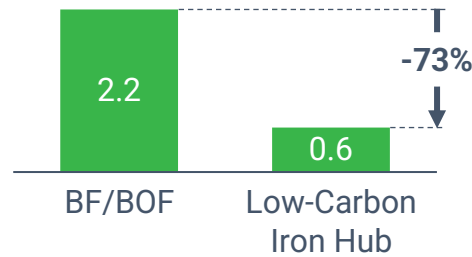
# Low-Carbon Iron Hub

JOINT VENTURE WITH UNITED ARAB EMIRATES FOR DIRECT REDUCTION PELLET PRODUCTION, HBI AND OTHER PRODUCTS TO EXPORT

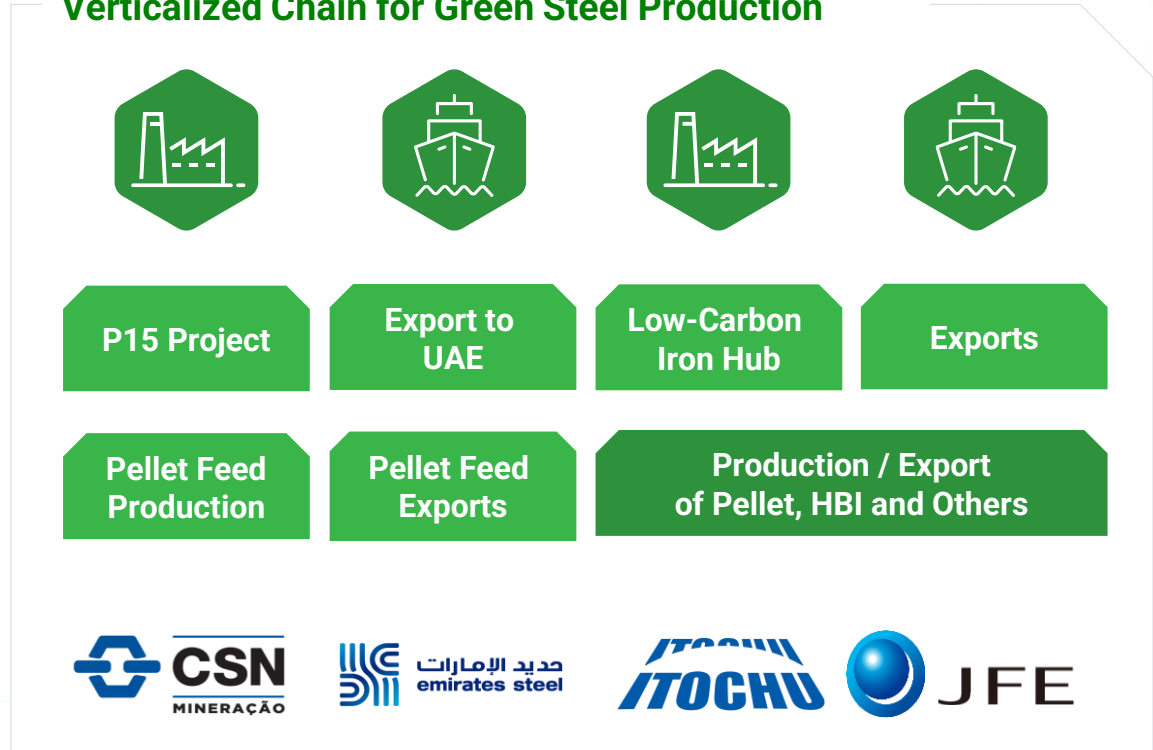


- Part of P15's iron ore production will go to Low-Carbon Iron Hub em Abu Dhabi (UAE)<sup>1</sup>
- Product with very low CO<sub>2</sub> emissions - operation with natural gas and carbon capture, with the possibility of conversion to hydrogen.
- CMIN is participating in the feasibility study on track with the right to participate in up to 10% of the project.

**CO<sub>2</sub> Emission**  
(ton of CO<sub>2</sub>/ton of steel)



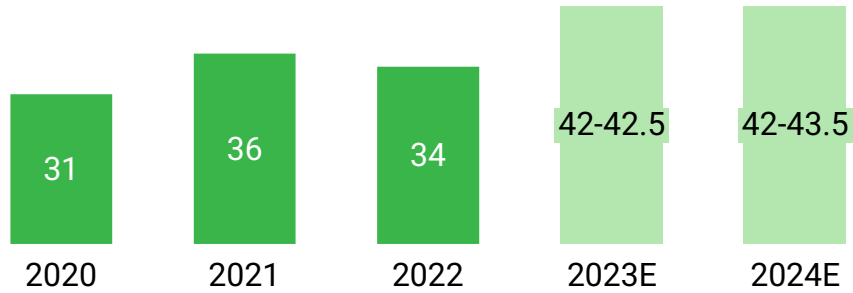
## Verticalized Chain for Green Steel Production



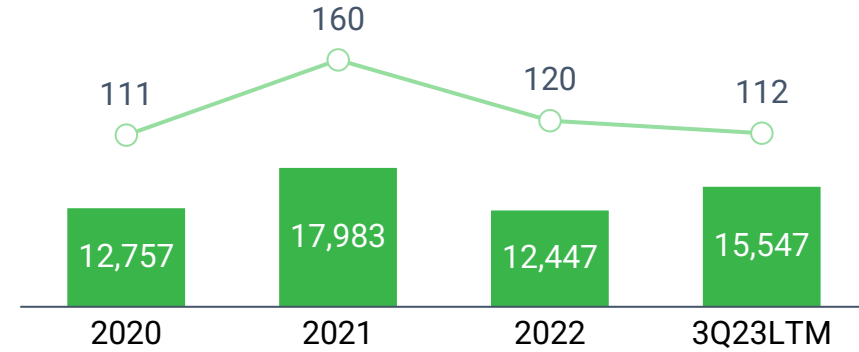
<sup>1</sup>Respecting the volumes of other existing offtake contracts.

# Performance Highlights

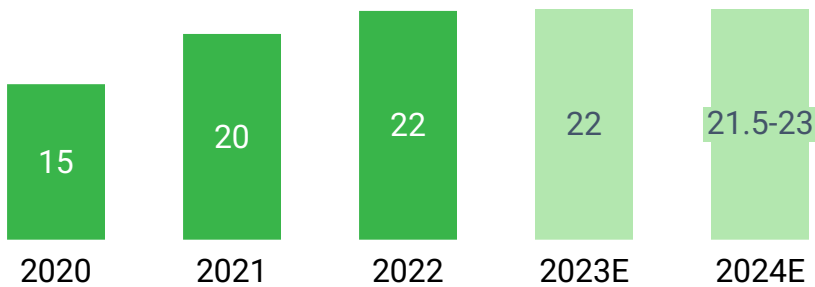
Production and Purchase Volume (Mtpy)



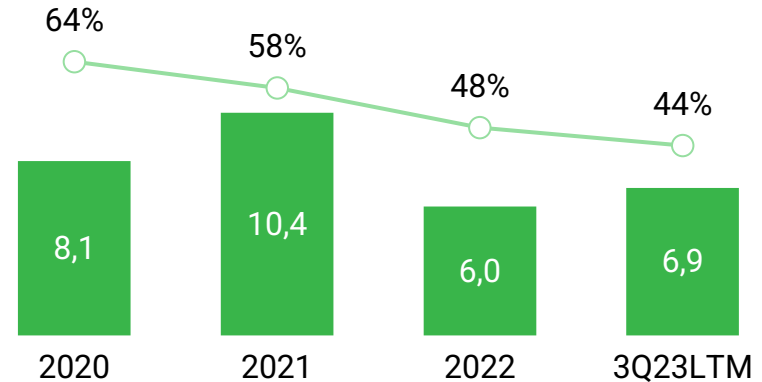
Net Revenue and Platts (R\$MM | US\$/t)



C1 Costs Evolution (US\$/t)



EBITDA and EBITDA Margin (R\$MM | %)





# Performance Highlights

- Cash position of **R\$ 10,6 Bi** in 3Q23
- With a deleveraged balance sheet, CSN Mineração will continue its **dividend policy of 80% - 100%** of net profit
- Secured funding of **US\$1,4Bi** for P15 financing (JBIC and Nexi)
- 2023 TSR YTD: 86%** (Nov 30, 23)

Unleveraged Balance

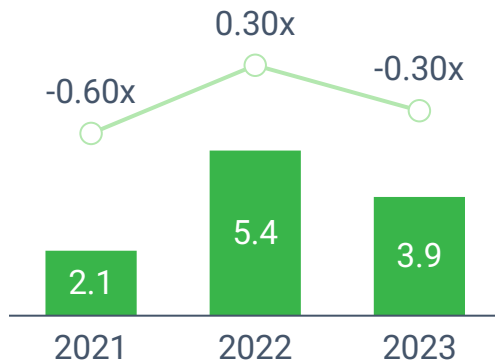
Dividends Payment

Investing for Growth

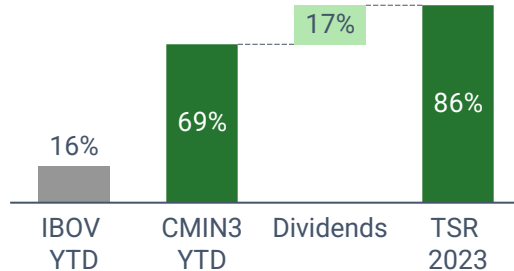
**CMIN**  
B3 LISTED N2

**R\$11.5 Bi**  
Total Dividends + JCP accumulated since the IPO

**Dividends and Leverage**  
(R\$ Billions and x)



**CMIN TSR 2023**  
(%)



E

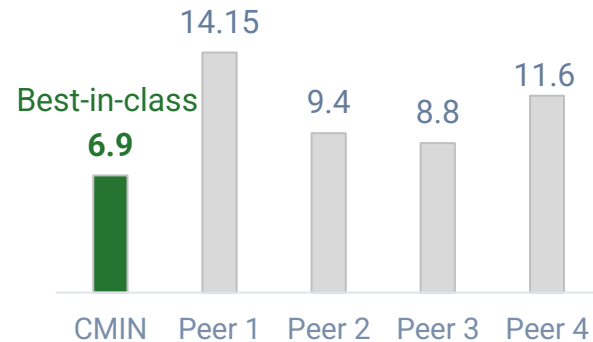
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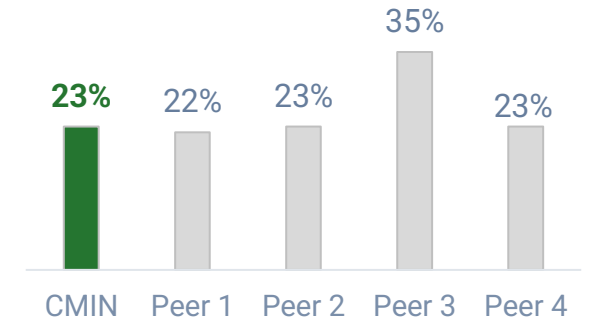
### Lower CO<sub>2</sub> intensity per ton of iron ore produced

[kgCO<sub>2</sub>/t iron ore – <sup>1</sup>direct emission]



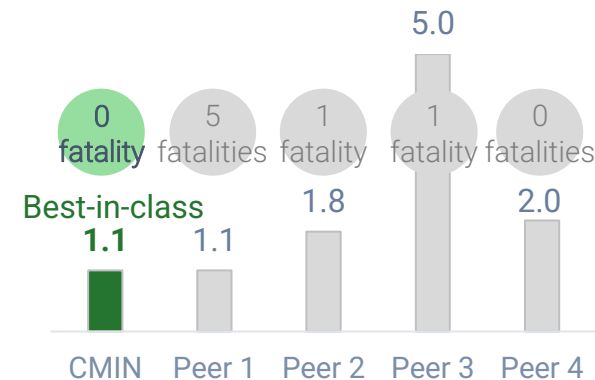
### Expanding women representation in workforce

[% of women in workforce]



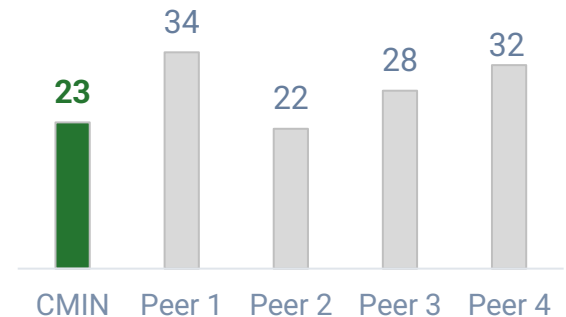
### Safety as non-negotiable value

[frequency rate (1M)<sup>2</sup> e #fatalities]



### CMIN is the 6th best globally in ESG rating (from 159 companies)

SUSTAINALYTICS - the lower the better



<sup>1</sup> Scopes 1 and 2  
<sup>2</sup> Own e Third-parties employees (1MM HHT).

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