











December 14, 2023



## $\underset{\text{CMIN}}{\text{CSN}} DAY|_{^{\text{R}}_{\text{CN}}}$

Initial Considerations Benjamin Steinbruch, CEO and Chairman

**CBSI Case Study** Alberto Senna – CBSI Director

**ESG** Helena Guerra - Sustainability Director

Innovation Felipe Steinbruch - Head of CSN Inova

### Steel

Luis Fernando Martinez, Commercial Director Alexandre Lyra, Steel Production Director

### Mining

Eneas Diniz, Managing Superintendent Pedro Oliva, CFO CSN Mineração

#### Cement

Edvaldo Rabelo, Cement Director Luis Fernando Martinez, Commercial Director

**Energy** Rogério Pizeta, Energy Director

#### Logistics

Marcelo Ribeiro, CFO Tufi Daher, TLSA Director

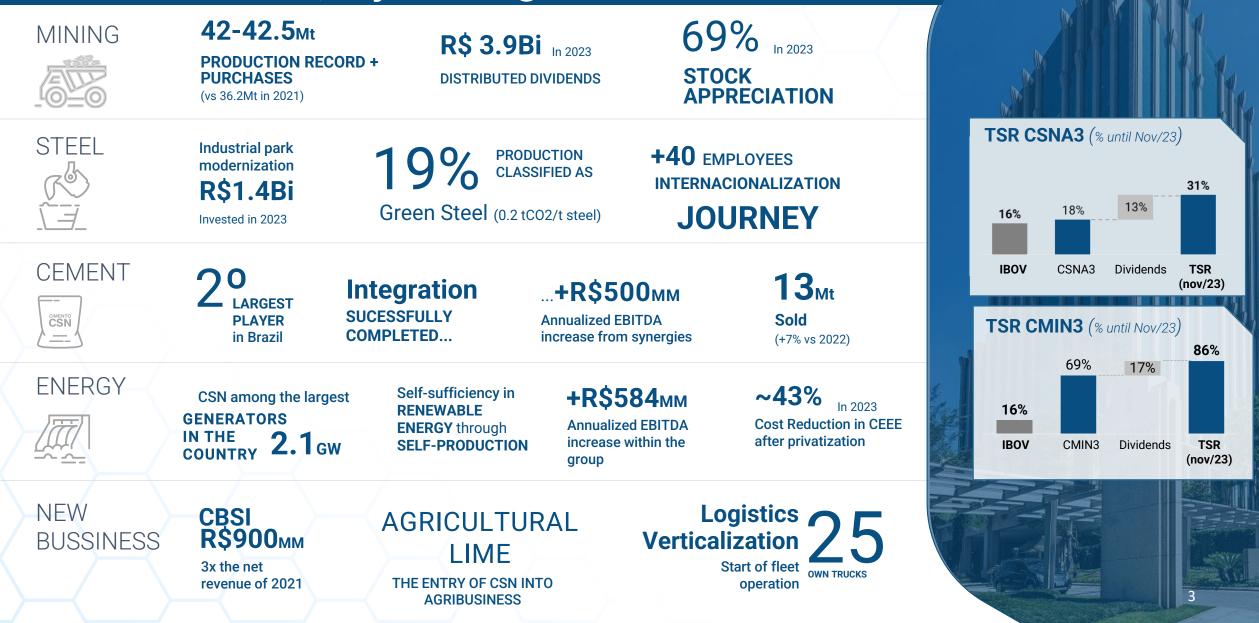
Financial Performance Marcelo Ribeiro, CFO Agenda

INENI

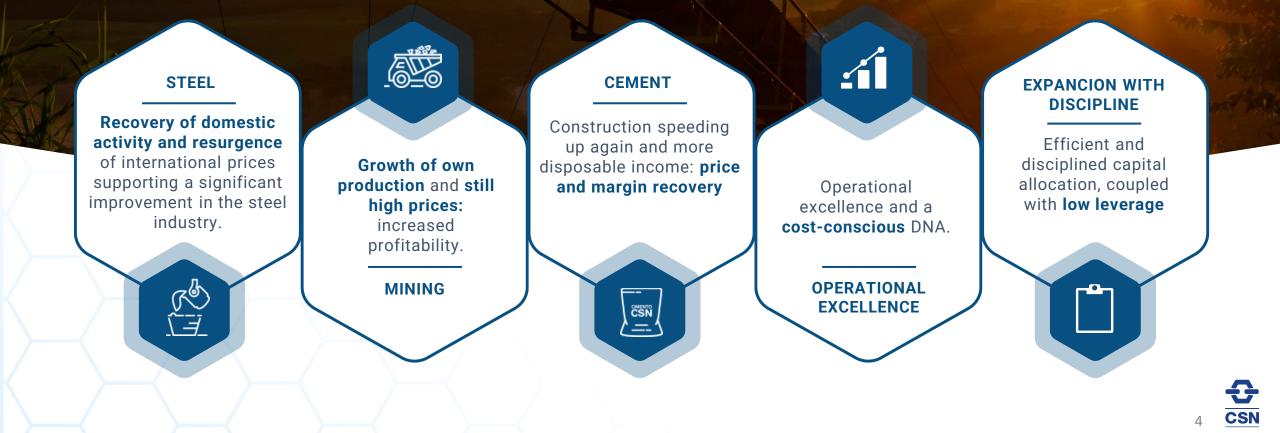
CSN



# 2023, a year of great achievements

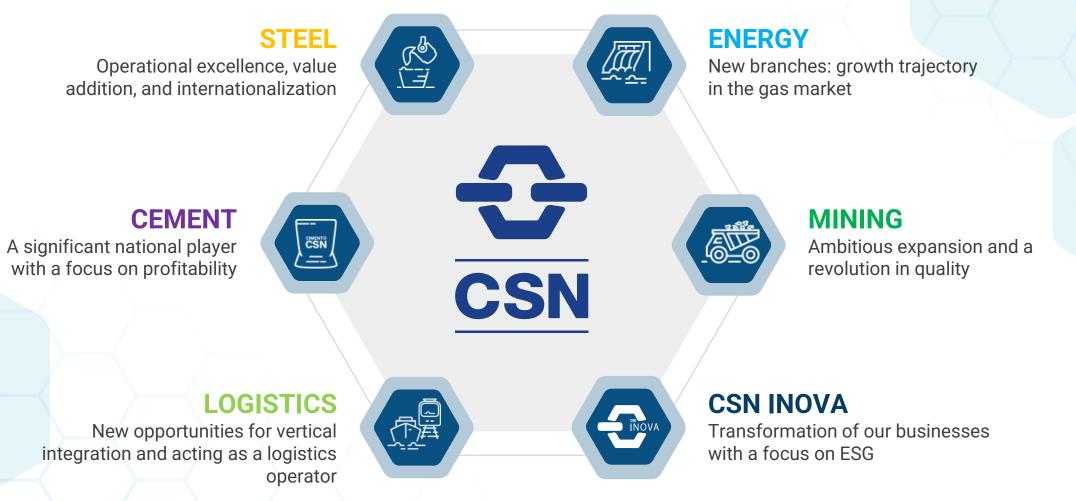


# Outlook 2024





# Vision for the Future



# CSNDAY

Alberto Senna CBSI Executive Director





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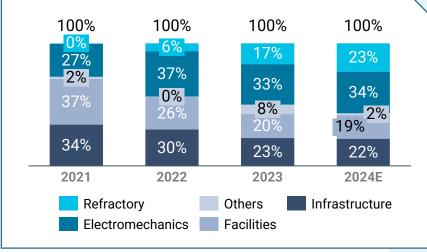
# Expansion of products and solutions: new platforms and business models providing synergies across segments

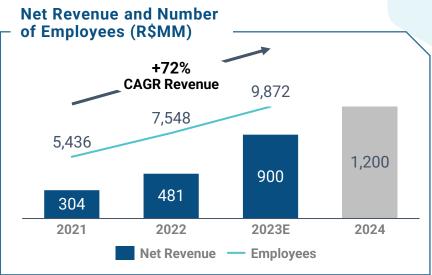
CBSI is a company within the CSN Group with a portfolio that includes integrated services and solutions attending various industry segments

In recent years, CBSI has won competitive processes within CSN, resulting in **accumulated savings of approximately R\$200 million**, in addition to the generated results within CBSI itself



#### Enhancement of the portfolio to - ensure greater profitability





**CSN** 

# CSNDAY

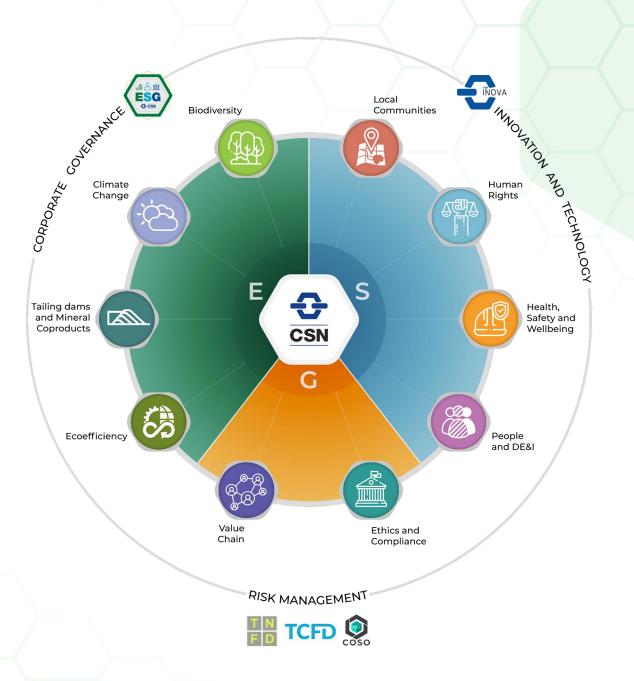
Helena Guerra CSO





Companhia Siderúrgica Nacio

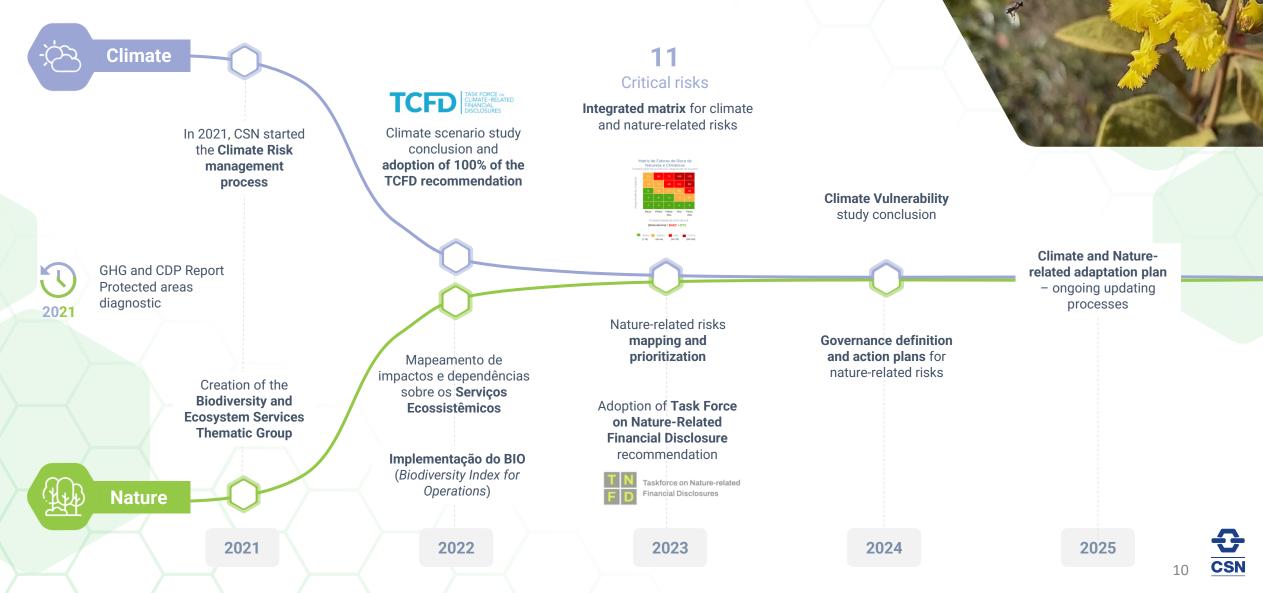
# **NEW** MATERIALITY







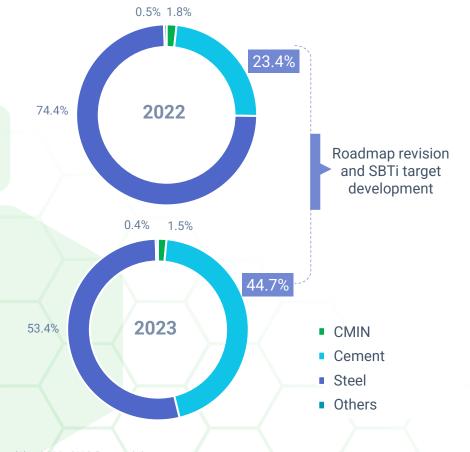
# **INTEGRATED RISKS MANAGEMENT** CLIMATE AND NATURE-RELATED







Percentage of GEE emission per sector<sup>1</sup>



2022: GHG Protocol data
 2023: estimated data considering the performance until October 2023

# Mitigation

## **New Assets Integration**

Updated Cement Roadmap, and SBTi target development 100% self-sufficiency in renewable energy

# **Adaptation**

# Climate Vulnerability study for strategic decision making

A four-step study started in 2023 aims to provide an instrument for high-level management to consider in strategic decision-making processes

# Stakeholder Engagement

Access our 1<sup>st</sup> Climate Action Report

## **1**<sup>st</sup> Climate Action Report

CSN published its first Climate Action Report, being one of the few Brazilian companies to develop this type of publication; the document will be disclosure biennially





## 2023 HIGHLIGHTS

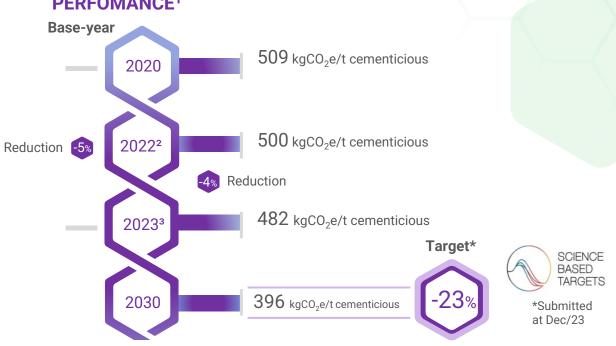
- Over 2,500 decarbonization performance indicators integrated with the new • assets, monitored on a monthly basis
- Revision of the decarbonization roadmap due to the inclusion of new projects (a pipeline of 83 decarbonization projects)
- Utilization of Artificial Intelligence for optimizing specific consumptions in • clinker kilns and grinding at the Arcos unit
- Expansion of the UTIS at the CSN Alhandra unit (injection of green H2 as a • combustion catalyst in clinker kilns)

**Brazil** 



### Focus for 2024

- Pilot for CCU in concrete
- Expansion of the use of alternative fuels and co-processing of waste in Alhandra and Pedro Leopoldo
- Expansion of UTIS for CSN Montes Claros and CSN Caaporã



Note: During the approval process of the SBTI (Science Based Targets Initiative) goals, the values may be subject to change. 1 Emission intensity using the GCCA 62 indicator -Emission at the Gross basis. <sup>2</sup> Includes the Arcos, VR, and Alhandra units. <sup>3</sup> Encompasses all CSN Cimentos units until October 2023

CSN



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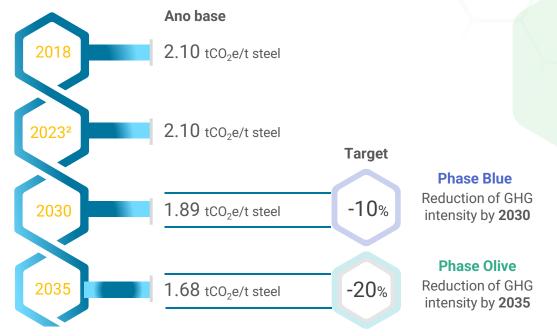
## **HIGHLIGHT 2023**

- **19%** of production certified **as Green Steel** (0.2 tCO2/t steel)
- Progress in the reform projects of coke batteries
- **Progress on UTIS installation**, injection of green H2 into the regenerators of Blast Furnace 2 🚭
- **Feasibility study of the use of charcoal** in the Blast Furnace and Sintering processes
- Utilization of Artificial Intelligence for optimizing specific consumptions in the steel industry furnaces

## FOCUS FOR 2024

- Feasibility study for the substitution of metallic charge
- Continuation of the Selene Project at CSN Paraná (green H2 production)
- Study of **technology update** and improvement with a focus on **decarbonization and operational efficiency** at UPV

### **PERFOMANCE**<sup>1</sup>



(1) Performance as per WSA methodology

(2) Acumulated value as of october 2023

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### 2023 HIGHLIGHT

- Positive results in tests of 60t off-road electric trucks.
- Completion of RPM limitation and **expansion plan testing** (saving -1.2 million liters of diesel by 2035)
- Development and installation of a start/**stop system** for large trucks (-37.8 million liters of diesel by 2035)
- Commencement of tests with additives for optimizing fuel combustion.
- Ongoing tests of cold agglomeration with an international partner

## FOCUS FOR 2024

- Implementation of the Autonomous Mine System (phase 1).
- Acquisition of three 60-ton 100% electric trucks
- Deployment of a system for optimizing routes and access
- Optimization of refueling operations through the **mobile station** strategy (-5 million liters of diesel by 2035)
- Tests for using synthetic fuel (HVO)."





# SUSTAINABILITY-ORIENTED PRODUCTS

## OUR AMBITION IS TO PROVIDE ESSENTIAL MATERIALS TO SOCIETY WITH CARBON-NEUTRAL EMISSIONS BY 2050



EcoElite Pellet-Feed

With the introduction of P15, CSN Mineração will become a strategic supplier of over 15 million tons per year of premium products with 67% Fe - essential in direct reduction routes for steel production in the steel industry.

## **Eco-Iron Hub**

JV in the United Arab Emirates to produce HBI and DRI

## <sup>co</sup><sub>2</sub> -10MtCO<sub>2</sub>e

The potential to be avoided with the use of this product in the DRI-EAF production route (Scope 3)

# ECOCEM 50

Low-CO<sub>2</sub> emission cement produced with alternative materials contributing to the circular economy. The product stands out for its high performance, enabling the production of green concrete using less water and raw materials.



22 ktpy Produced In 2023

Global average 618 kgCO<sub>2</sub>e/cem ECOCEM 275 kgCO<sub>2</sub>e/cem





In 2023, green steel accounted for 19% of all steel produced by CSN. Due to its very low CO<sub>2</sub> emission intensity, SWT received the 'Green Steel' certification.



SWT Green Steel 0.2 tCO<sub>2</sub>e/steel





CSN

Commercialization of renewable energy certificates, leveraging the upsides of acquiring new energy assets.

+150 MWm Potential for 2024









## **Air Quality**

### **IMPROVEMENTS AT VOLTA REDONDA**

+R\$ 0.5M Batteries 4A, 4B and 5 dedusting

R\$ 51M

General repairs in sintering #3 and #4

## Water Management



## **Biodiversity**



**CSN** Group protected areas control 90.5 thousand hectares

## **Circular Economy**



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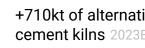
R\$ 260M in special sales, among coproducts and scrap 2023E

**REVALORA** Waste management platform

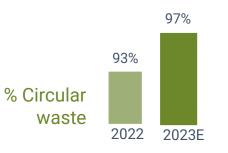


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New waste management planta in Sorocaba



+710kt of alternative fuel used in cement kilns 2023E



+ Fog cannons + Innovation in polymers + Road sprinklers

### **ENVIRONMENTAL MONITORING**



In 2024, new monitoring stations for settleable material in Rio de Janeiro

### **DEFINITIVE SOLUTION**



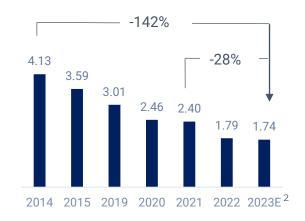
+R\$ 712M Sintering electrostatic precipitators substitution





# Safety in focus—@

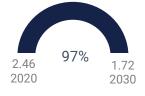
## **CSN Group TRIFR<sup>1</sup>**



Goal-in-sight



Reduce the accident frequency rate by at least 30% by 2030



## **CSN Mineração TRIFR<sup>1</sup>**



**Goal-in-sight** Reduce the accident frequency rate by at least 30% by 2030



**10 YEARS WITH NO FATALITIES** 



## - 2023

Lowest frequency rate in the last 10 years at CSN

Expansion of the **Alcohol and Drug Prevention Program** (ADPP), with +70,000 tests conducted in 2023

Implementation of **6 new virtual reality training** modules

**Zero accidents** with participants of the Readiness Test, expanding the program by +113% in participants

+19,000 individuals vaccinated through the H1N1 Vaccination Campaign

- 2024

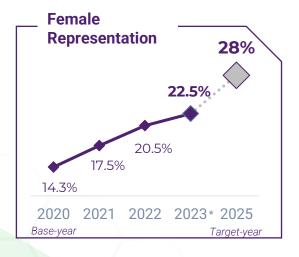
**Process Safety Management Project** 

Assessing critical scenarios of industrial processes to prevent fatal accidents



# AND MORE INCLUSIVE

We have reached the **milestone of 6,000+ women in the CSN Group**, getting closer to the goal of **28% female representation in the workforce until 2025**.



### **Corporate University**

- Foundation for the people development initiatives within the CSN Group
- +70 available contents
- Mandatory development tracks

**Diversity and Inclusion Literacy** 

Racial diversity\* (2022x2023)



**PwD\*** (2022x2023)



### Awards and Recognitions

- CSN Cimentos received the **'Women in** Leadership' 2022/23 award from the Women in Leadership in Latin America (WILL) NGO
- We have joined the **Empresa Cidadã** program
- CSN Cimentos achieved the Great Place to Work seal
- Desafio Mover Award

# We are 6,342

women





### Territorial Development, Evolution of the Theory of Change

PIAUÍ – Inclusão Produtiva Rural

Rural Productive Inclusion Investment Program in the territories adjacent to the **Transnortheast Railway in Piauí**.

- R\$ 13.9 M approved investment
- 400 ha + 100 beneficiary families



### VOLTA REDONDA – Polo Street Art

Partnership with the Municipality of Volta Redonda for the **training of artists** and the creation of a new environment for the **creative economy** through interventions in urban art and local entrepreneurship

+ 5,500 Beneficiaried Young people

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HUMAN RIGHTS

### CSN MINERAÇÃO - DDDH

- 144 action plans defined for engagement and awareness on human rights
- 37 adverse risks identified

+ 5 Units of Garoto Cidadão +1,000 students (2022 x 2023)

**Engagement Plan** 

**Rights guidelines** 

Diagnosis

CSN CIMENTOS - Stakeholder

aligned with global Human

methodology



R\$ 200 M in social investments in the last three years (2021, 2022, 2023E)

## 1<sup>st</sup> Impact Report

Access the 1<sup>st</sup> Impact Report from CSN Foundation



063ebnur

csncultura

Impact Report CSN Fundation



# Governance

//Project



# Value Chain





## **ANEFAC** Award

**CSN Mineração** won the Transparency Trophy from ANEFAC (National Association of Executives).





## Sustainable-Finance

With the initiative to align financial strategy with sustainability performance, we have closed financing lines<sup>1</sup> totaling **R\$ 0.5 billion** 

<sup>1</sup>Aligned with the Sustainability-Linked Loan principles

## **Compliance Training**

Continuously striving to elevate the level of our ethical culture +96% Trained in Compliance (100% 2023E)



De-scaling ESG risk +100 suppliers

selected based on relevance and criticality to respond regarding their ESG actions and mitigation of socio-environmental risks

### **Next steps**

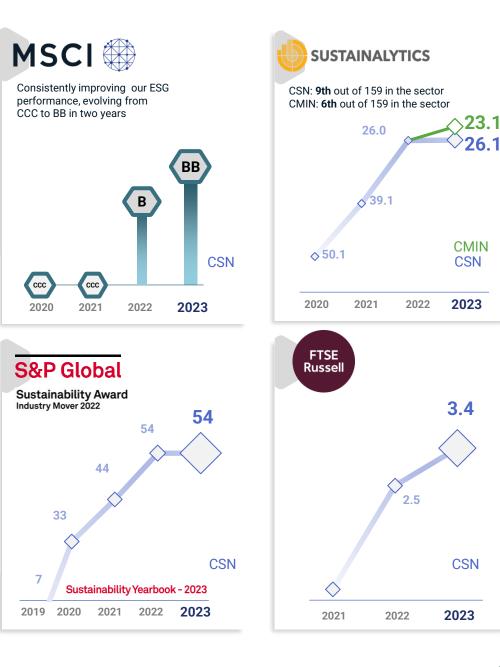
- Unified ESG risk matrix aligned with ISO 20,400
- Development of Sustainable Procurement Strategy



# **ESG** Ratings



\*\*CSN Group announces it has been included in the FTSE4Good Index Series. Created by the global index and data provider FTSE Russell, the FTSE4Good Index Series is designed to measure the performance of companies demonstrating strong Environmental, Social and Governance (ESG) practices. The FTSE4Good indexes are used by a wide variety of market participants to create and assess responsible investment funds and other products. FTSE Russell evaluations are based on performance in areas such as Corporate Governance, Health & Safety, Anti-Corruption and Climate Change. Businesses included in the FTSE4Good Index Series meet a variety of environmental, social and governance criteria.



# CSN Inova

Felipe Steinbruch, Head of CSN Inova





Companhia Siderúrgica Na



# Integrated Innovation Platform





Identified opportunities are prioritized, categorized and solved systemically, scaling the degree of impact innovation at CSN Group

## **PRIORITIZATION CRITERIAS:**

- STRATEGY ALIGNMENT;
- FINANCIAL AND OPERATIONAL INDICATORS;
- TECHNICAL MATURITY; AND
- ESG MATERIALITY MATRIX (VIA ESG COMMITTEE).

### **MAIN CHALLENGES:**

- DECREASE OF FOSSIL FUEL CONSUMPTION AND ENERGY USE;
- HIGHER AVAILABILITY OF ASSETS;



REUSE AND ENVIRONMENTAL RECOVERY OF WASTE AND REJECTS FOR COPRODUCT GENERATION;



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DATA USE FOR PROCESS AND CORPORATE DECISION MAKING OPTIMIZATION; AND

EW PRODUCTS AND MATERIALS.

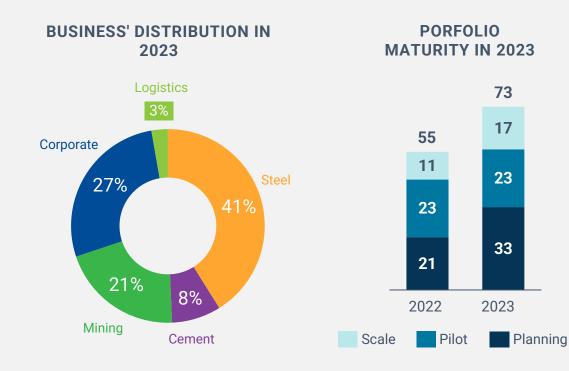




RAW MATERIAL CSN INOVA



# **CSN Inova's** thresholds



## +R\$ 400 MM RESULTS' TRACK RECORD

### SOME OF OUR PROJECTS:

Hydrogen for Fossil Fuel Reduction in Cement Kilns – R\$ 145MM

UPV's Internal Logistics Digitalization – R\$4MM

Mfe Equipment for Moisture Drainage - 22MM

Trading System for Waste – R\$ 15MM

2 Systems for International Freight Management – R\$43 MM

Reclassification of emergency labor situations- R\$60,6MM

Lei do Bem – R\$28MM

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# Portfolio





# Future CSN Inova

**CSN INOVA** WILL BE THE 6TH SEGMENT OF CSN GROUP

MARKET SOLUTIONS OF SCALE (CVC, SPIN-OFFs, JVs)

ADVANCES IN NEW TECHNOLOGIES AND TRENDS (INCLUDING DIGITALIZATION, CARBON USES, GREEN FUELS, AND CIRCULAR ECONOMY)

**IMPACT INVESTING** (TAILORED FINANCE PRODUCTS AND SOCIAL INNOVATIONS ALIGNED WITH CSN GROUP'S THEORY OF CHANGE)



# CSNDAY

Luiz Fernando Martinez, Commercial Director Alexandre Lyra, Operations Director



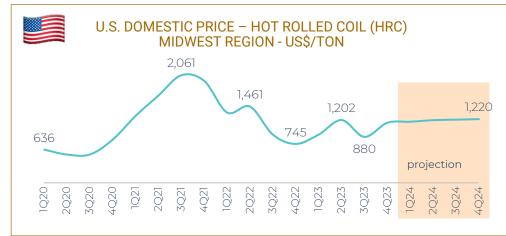


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# **Global Market 2024**

## **POSITIVE OUTLOOK ON INTERNATIONAL PRICE RECOVERY**



- Price recovery following negative impact of the automotive sector strike
- Supply-side discipline accommodating ٠ short-term soft demand
- Strong medium-term demand growth assured by structural programs (IRA and Infrastructure Act)

EXPORT PRICE CHINA - HOT ROLLED COIL (HRC) US\$/TON 902 783

- 655 628 474 projection 2Q20 3Q20 4Q20 1Q21 2Q21 4Q21 1Q22 3Q22 3Q22 1Q23 2Q23 2Q23 3Q23 4Q23 3Q24 Q24 Q24
- Positive outcomes from economic incentives for the real estate market
- Stimulus for the construction sector ٠ through the issuance of 1 trillion RMB in sovereign bonds for local governments
- Negative export margins and inventory reduction

Source: CRU, Fitch, Fastmarkets



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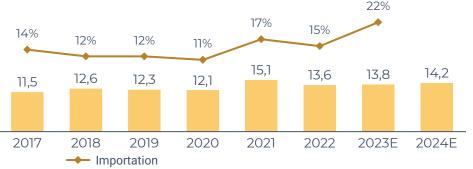
# **Domestic Market 2024**

**GROWTH FORECAST** 

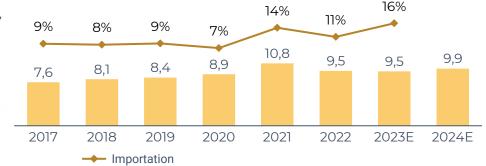
Recovery of domestic activity supported by lower interest rates, controlled inflation, and the continuation of government programs

#### **Automobiles** Trucks 14% 12% 12% +5% +12% 12,6 12,3 11.5 Buses Yellow Line +8% 7% 2017 2018 2019 ---- Importation White Goods **Agricultural Machinery** +5% +5% Distribution **Construction Industry** 9% 9% 8% +3% 8,4 7.6 8.1 2017 2018 2019 ---- Importation

### APPARENT CONSUMPTION OF FLAT STEEL (MT)



#### APPARENT CONSUMPTION OF LONG STEEL (MT)



Source: Company Estimate (Data excludes CSN imports), ANFAVEA, IBGE, SECOVI, CBIC, ABIA, ABEAÇO, IABr.

### Industry

Anticipation of a new record harvest, expansion of renewable energy projects, and modernization of the industry

## **Construction Industry**

Advancement of investments in affordable housing and infrastructure, New Growth Acceleration Program (PAC) with substantial investments from Petrobras and in the defense industry

## **Automobiles**

Resumption of exports to Argentina, anticipation of a truck fleet exchange plan, foreign investments in factories in the country, 'Caminho da Escola' project with a demand for 16.3k buses





# **Domestic Market 2024**

The recovery of prices in the international market and the growth of domestic demand will support the recovery of prices in the domestic market

Sensitivity of Import Premium | Hot Rolled

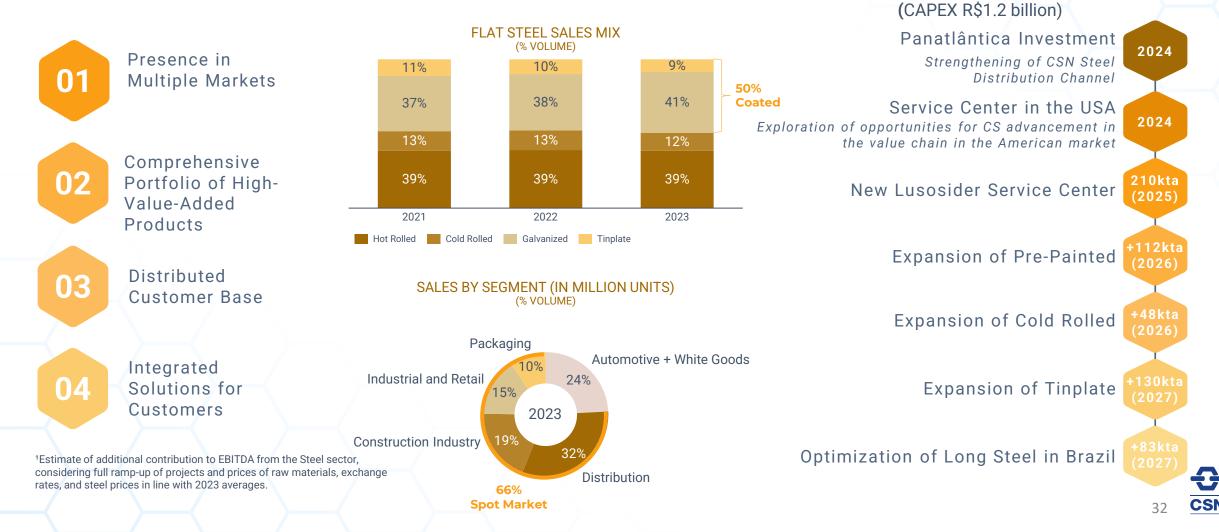
JAN/FEB 2024	HRC China Export (US\$/t)				
	544	554	564	574	584
4,90	14%	12%	10%	8%	7%
4,95	13%	11%	9%	7%	6%
5,00	12%	10%	8%	6%	5%
5,05	11%	9%	7%	5%	4%
5,10	9%	8%	6%	4%	3%

CSN

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# **Commercial Strategy for Value Generation**

Focus on higher value-added products and diversification of the customer base



STRATEGIC PROJECTS

+R\$0.5 billion per year EBITDA<sup>1</sup> until 2027

# Operational Excellence: Expectations for 2024

Operational efficiency improvement initiatives will result in Cost Reduction of ~R\$ 1.3 billion and Full Production in 2024



### **OPERATIONAL EFFICIENCY IMPROVEMENT INITIATIVES**

GENERAL REPAIRS AND MAJOR MAINTENANCES

Optimization of Maintenance Services – Mobile Workforce (Maintenance Control Tower)

### SPECIFIC CONSUMPTIONS AND METALLURGICAL YIELD

Deployment of Lean Manufacturing throughout the Steel Mill with Continuous Improvement Teams and

and LTQ

Pickling Lines

• Plate Transport Lines between the Steel Mill

Reduction of Normative Stocks of Raw Materials (Ore, Pellets, Imported Coke)

- Safety 6.0 Program and Daily Safety Walks led by all leadership.
- Cultural Transformation through monthly alignment meetings with the entire operational team
- Investments in Sinterization (Electrostatic Precipitators), Polymer Spraying on raw material piles, fog cannons, mechanized cleaning, etc.
- Comprehensive 5S Program at the Presidente Vargas Plant.

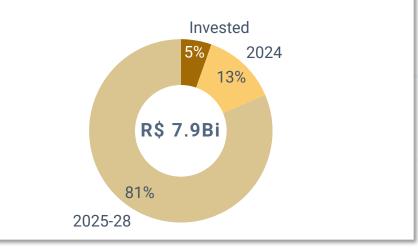
# Roadmap for Process Improvements 2023/2024

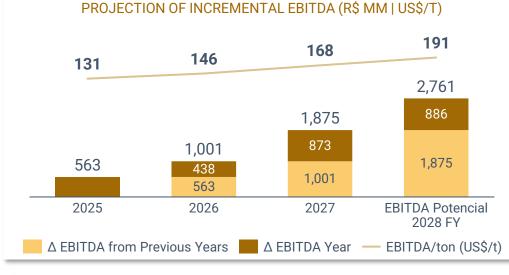


# The modernization of the industrial park will add approximately R\$2.8 billion<sup>1</sup> to the Steel Mill's EBITDA

The ongoing investment plan will ensure an increase in volume and margin recovery over the next few years





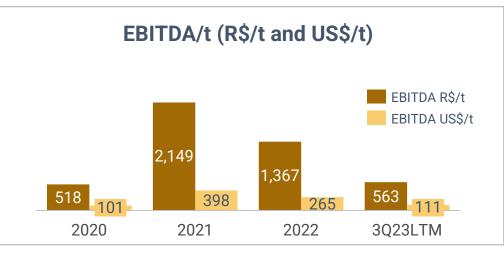


<sup>1</sup>Estimate of additional contribution to the Steel Mill's EBITDA, considering the full ramp-up of projects and raw material prices, exchange rates, and steel prices in line with the 2023 averages

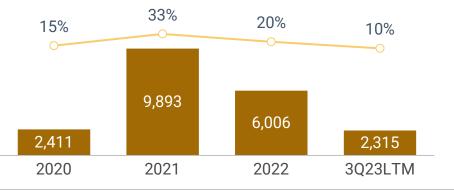
# **Performance** Highlights











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# CSNDAY

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







### TOTAL ORE HANDLING

It has already surpassed the 2022 record

### OPERATIONAL EXCELLENCE



### IRON ORE PURCHASES

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

### TOTAL SALES

Already exceeded the previous record of 38.2Mt in 2019 **2023** A YEAR OF OPERATIONAL RECORD



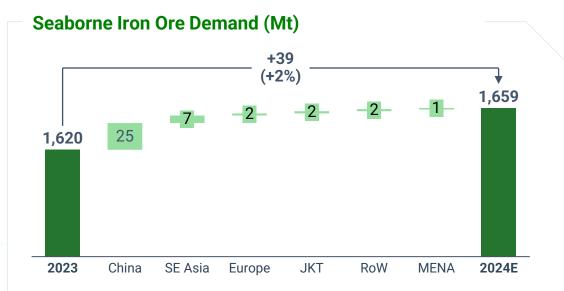
### PRODUCTION + PURCHASES

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

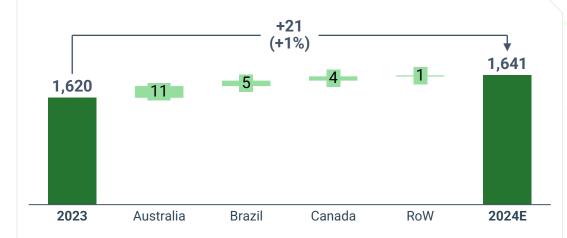


**CHINA:** Infrastructure investments boosted by a 1 trillion RMB package, as well as stocks normalization.

**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.

#### Iron Ore Inventories (Mt)





### 2023 **Prices**







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

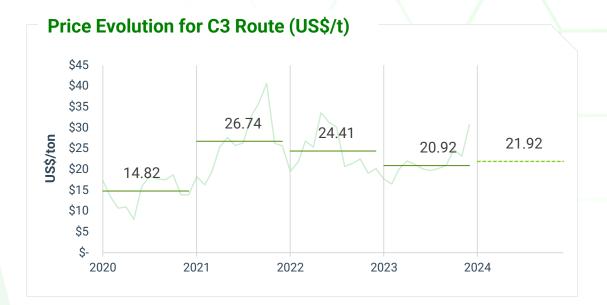




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### Sea Freight



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.

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### **Tailing and Dams Management**

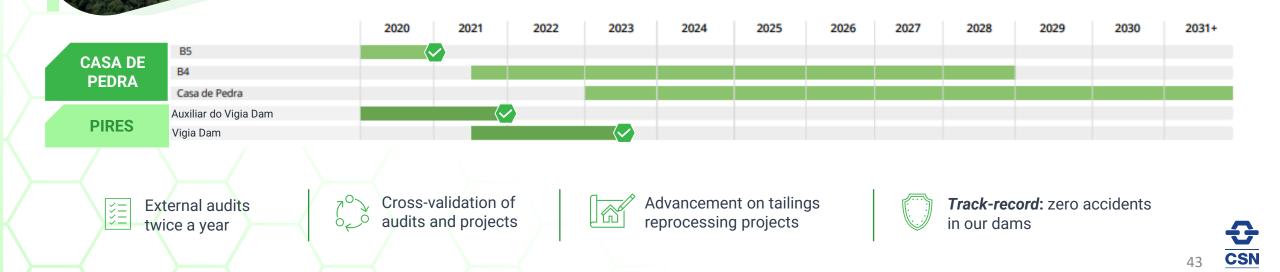
### **2023 MAIN ADVANCES**

**De-characterization Schedule** 

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



### **Operational Resilience:** Adaptation and risk mitigation

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



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.

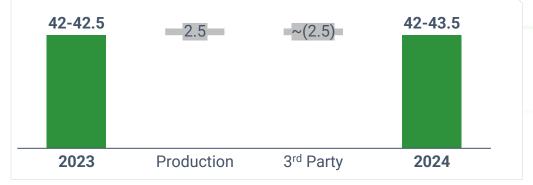




### 2023 vs 2024 Volumes

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  $\sim$ 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.





2

3



### **CFR China** Costs

#### ENHANCEMENT IN OPERATIONAL RESILIENCE AND LOGISTIC COST PRESSURE



Inflation in logistic costs (maritime, diesel, and railway) and the pursuit of greater operational resilience.

Higher production volume and increased operational efficiency contribute to cost reduction

A combination of C1 in line with 2023 and a mix improvement will result in a more competitive COGS next year and better margins.





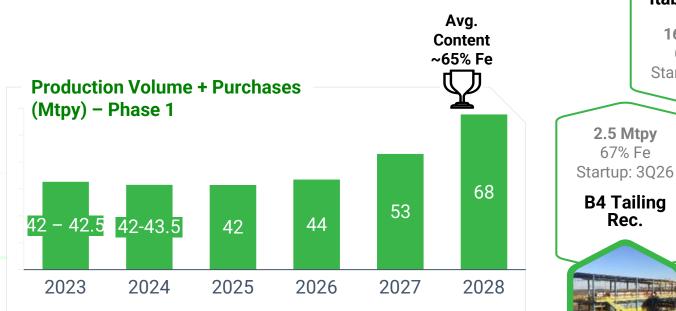


CSN

47

### 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.





**Total Projects Volume of 28.4Mt** 

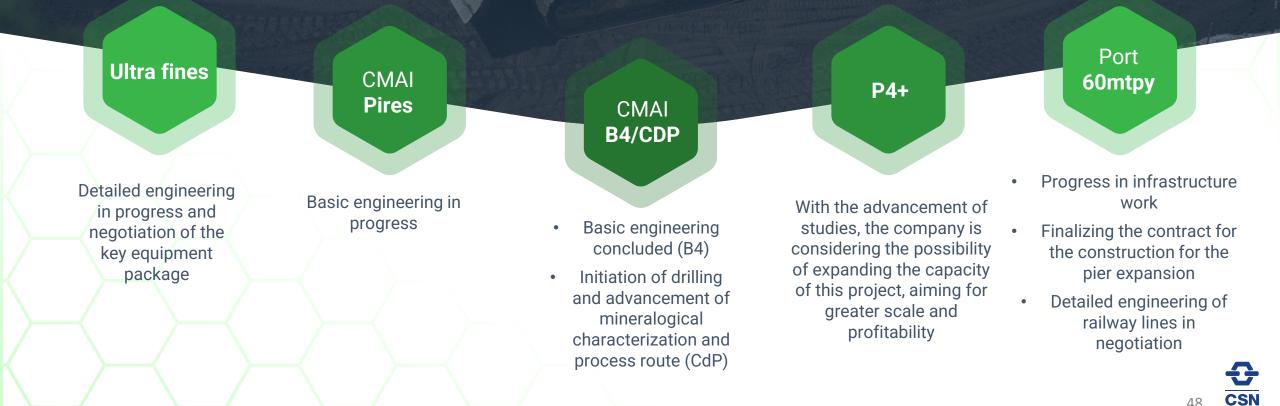
**R\$15.3 Billion Investment** Average of R\$3.0 Billion/year





### **EXPANSION PROJECTS UPTADE**

HIRING DISCIPLINE HAS LED TO UPDATES IN SCHEDULE AND CAPEX PRIORIZATION OF P15 AND PROJECTS RELATED TO TAILINGS/DAM DE-CHARACTERIZATION





### MAIN MILESTONES

99% Manufacturing Package 1 equipment

Others:

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

99%

- Package 1

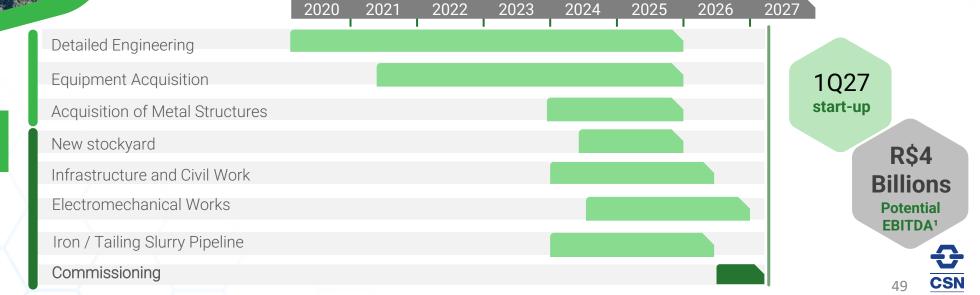
**Gas Station Relocation** 

25%

**Physical** 

project

progress of the





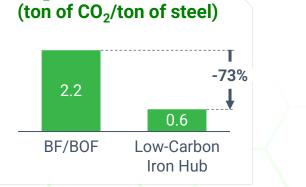
### **Low-Carbon Iron Hub**

### 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>

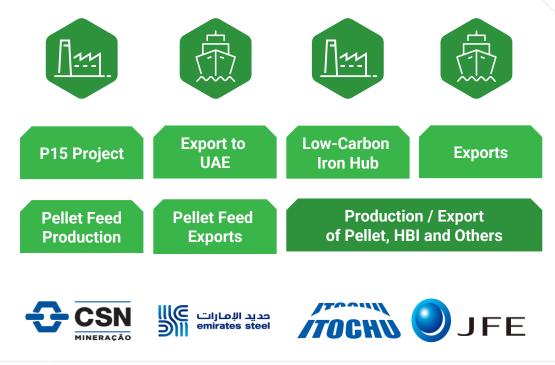
Product with very low  $CO_2$  emissions - operation with natural gas and carbon capture, with the possibility of conversion to hydrogen.

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

#### Verticalized Chain for Green Steel Production



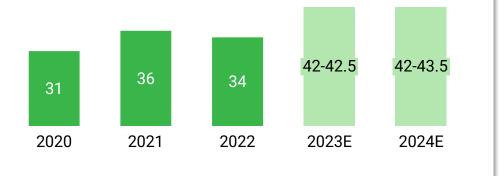






### **Performance Highlights**

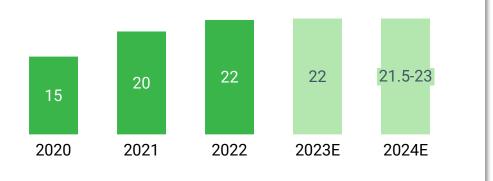
### **Production and Purchase Volume (Mtpy)**



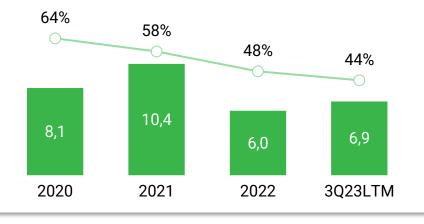
Net Revenue and Platts (R\$MM | US\$/t)



C1 Costs Evolution (US\$/t)



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



51 **CSN** 

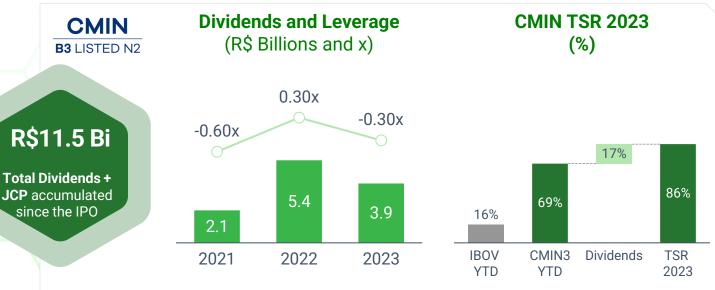
### **Performance Highlights**

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)

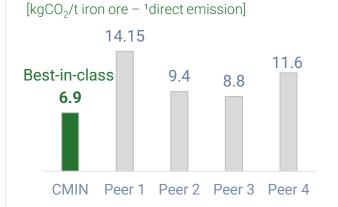








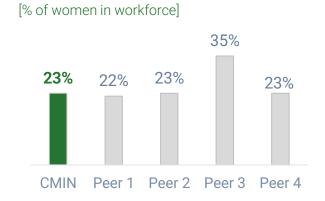
### Lower CO<sub>2</sub> intensity per ton of iron ore produced



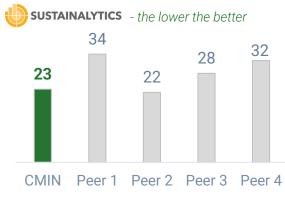
1.8

5.0

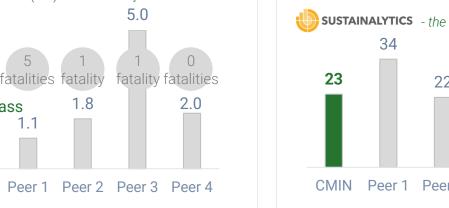
#### Expanding women representation in workforce

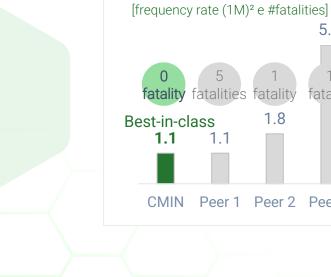


### CMIN is the 6th best globally in ESG rating (from 159



companies)





Safety as non-

negotiable value

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

## CSNDAY

Luis Fernando Martinez, Commercial Director Edvaldo Rabelo, Executive Director of Operations



CINEMIS

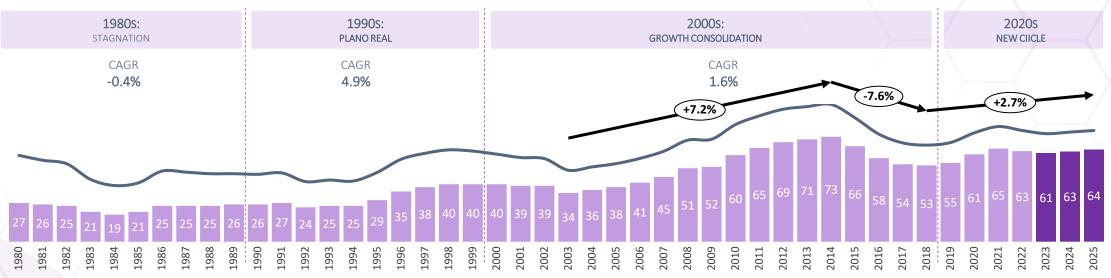
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### NEW GROWTH CICLE

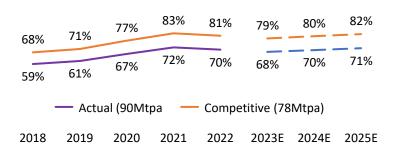
#### **Cement Consumption** | **Per Capita Consumption**

Volume (kt) — Per Capita Consumption (kg per inhabitant)



The prospect of declining interest rates combined with new incentives for the lower income segment, and expectations of increased investments in infrastructure, will drive the return of the economic cycle

#### % Utilization of Production Capacity

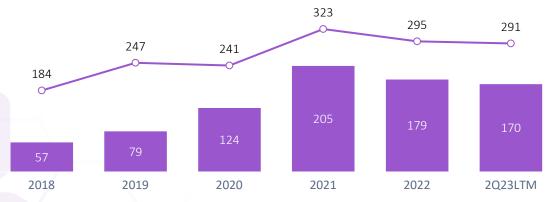


Source: SNIC/IBGE/Company's Internal Analysis<sup>1</sup>



### Supported by a favorable moment in the real estate sector...

Housing Financing through Savings (SPBE) SBPE (R\$ billion) — Residential Units Launched



Stabilization at high levels of new real estate launches and SBPE financing

#### Fundamentals Driving Growth

Incentives for real estate credit, in addition to FGTS, with an increasingly larger participation of the capital market, and expected growth in the household income

The new cycle of interest rate reduction and inflation slowdown is already beginning to be priced in by the market

Favorable economic environment, mainly driven by the return of consumer confidence

Resumption of launches of affordable housing: the new program has a broader scope, covering more income brackets



There is a deficit of 5.8 million houses (2022). By 2030, it will be necessary to build approximately 1.2 million houses per year

Fonte: ABECIP/CBIC/ABDIB/Banco Central



The required investment to build new houses is around R\$ 229 billion per year until 2030.



Increase in resources allocated to the program. Budget for 2024 grows by 41% compared to the current allocation



### ...and driven by infrastructure auctions

A robust pipeline of infrastructure projects will direct significant investments, resulting in increased consumption

#### **Concessions and New Auctions**



Projection of R\$ 201 billion in private investments, through auctions held since 2019 and scheduled from 2024 to 2028



#### Infrastructure

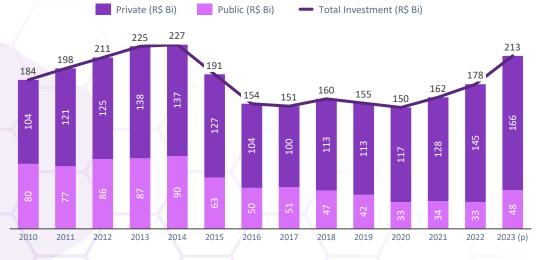
Forecasted increase in the budget allocated to infrastructure in 2024, thanks to the New Acceleration and Growth Program (PAC)

#### **Lower Inflation and Interest Rates**

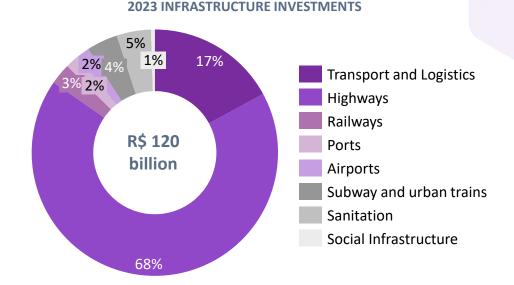


Optimistic scenario for 2024, considering the target for reducing inflation and the cycle of cutting the basic interest rate

#### PUBLIC AND PRIVATE INFRASTRUCTURE INVESTMENTS (R\$ BI)



Source: ABDIB, Partnership Investment Program and LCA Consulting



#### 57

## Strong market fundamentals indicate a **price recovery**



Growing demand coupled with higher industry utilization rates are driving price recovery



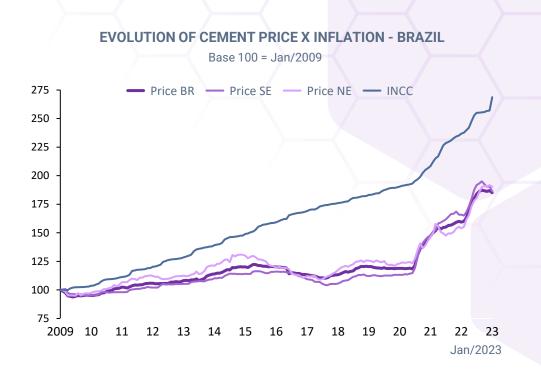
Cement prices in Brazil have a significant difference compared to price indices and other products within the construction sector



By international standards and considering the exchange rate, cement prices in Brazil remain pressured despite a significant increase



The need for investments in additional capacity tends to put pressure on price increases to ensure capital remuneration





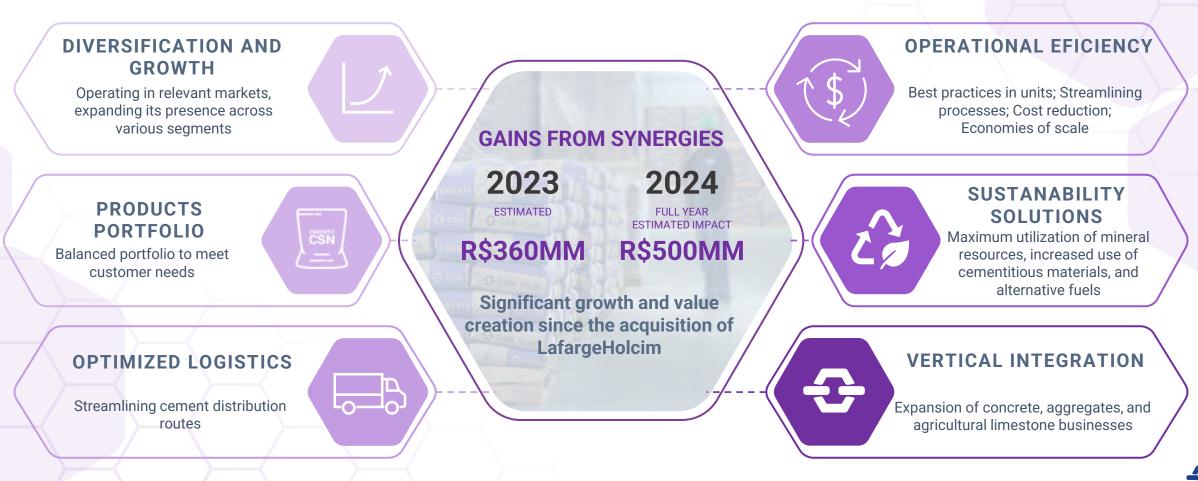
Source: SNIC 2022





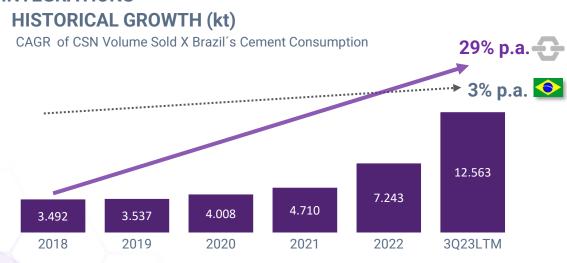
### Successful integration of the new assets

LEVERAGING THE SKILLS, TALENTS, AND KNOWLEDGE OF ALL OUR EMPLOYEES AND OPERATIONS

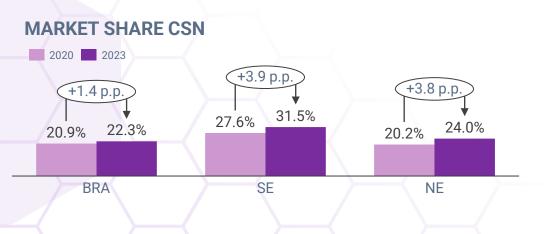


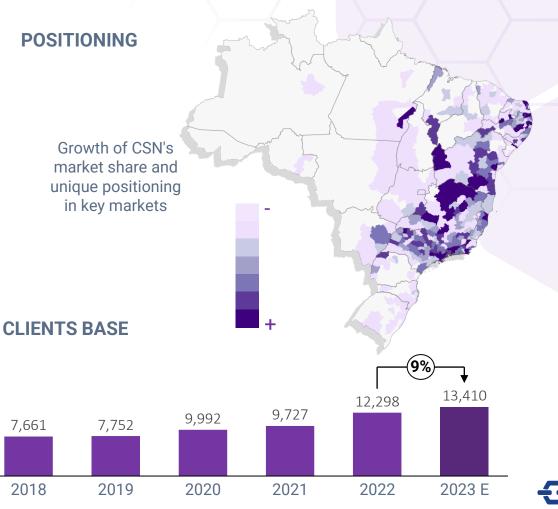
### **Accelerated Growth**

#### CONSOLIDATION OF GROWTH WITH GAINS IN MARKET SHARE THROUGH THE OPTIMIZATION OF ASSESTS POST-INTEGRATIONS



Source: SNIC / Company's Internal Analysis





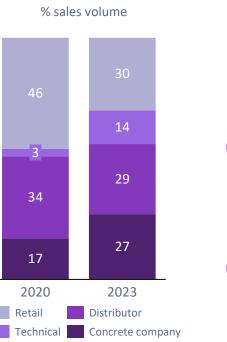
CSN

### Commercial **Strategy**

The acquisition complemented the cement portfolio with technically recognized products in the market, positioning CSN more resiliently to meet demand and capture the infrastructure investment cycle







SALES MIX BY PRODUCT % sales volume 2020 2023 BAG **61**% **79**% BULK 21% **39**% 

Source: SNIC / Company's Internal Analysis



### **Retail presence and Downstream**



### RETAIL

Franchised Construction Stores with a rich ecosystem, ensuring quick reaching to the final consumer





#### AGGREGATES

Enhancing synergies with Concrete. Competitiveness gain and **operating in the SP** market in an integrated way



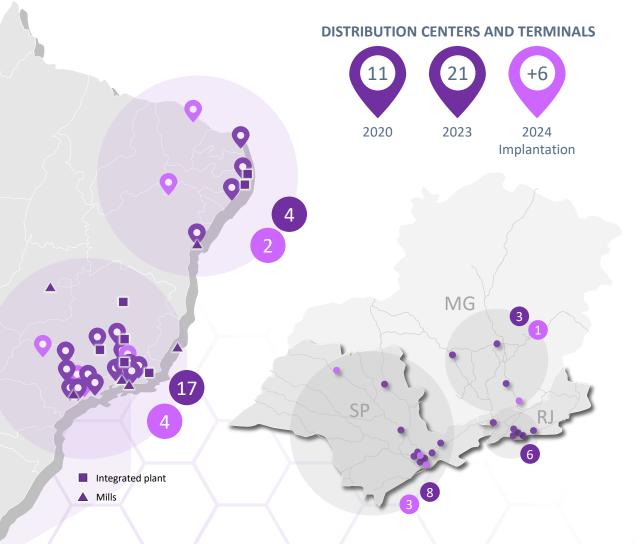
### CONCRETE

Leveraging synergies with Cement and Aggregates. Important differentiation lever and operating in the SP market in an integrated way



CSN

### Geographic diversification and logistics optimization



#### STRATEGIC RATIONALE

Growth in the number of DCs and geographic diversification

Logistics optimization strategy with synergies between segments

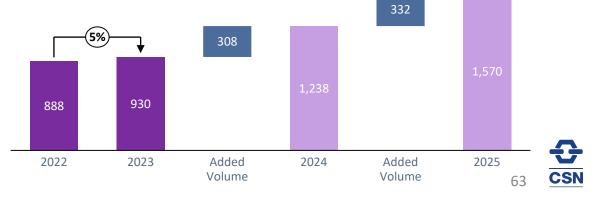
Cost reduction through optimization of the road and rail mix (reactivation of the Ribeirão Preto terminal, renovation of wagons and shipping infrastructure)

Innovation and efficiency gains through the implementation of the freight center and renegotiation of logistics contracts

Own logistics operation project kickoff

#### **RAIL GROWTH OPPORTUNITY**

Potential added volume (kt)





The new CSN Cement

**Installed Cement Capacity** 



#### Southeast, Northeast, and Midwest

Grinding

**Integrated Plants** 

21 **Distribution Centers** 

Aggregate Plants

**Concrete Units** 

**Franchise Channels** (Retail)

64



### **Industrial Management** improvement

**COST REDUCTION** 

- 15% reduction on energy bill (integration with CSN Energia): R\$ 100MM impact in 2023 (may-dec)
- Scale gain in acquisition of strategic inputs
- Review of contracts with third parties



REACTIVATION OF ASSETS AND REDUCTION OF BOTTLENECKS

- Reactivation of the blast furnace in Pedro Leopoldo and Barroso (+400ktpy)
- Reactivation of the Sorocaba plant (+320ktpy)
- Expansion of our own production of alternative fuels (+50% vs 2022)



**NEW INDUSTRIAL FOOTPRINT** 

- Optimization of base cement and clinker supply flows between plants
- Management and planning optimization in maintenance and major downtime
- Integrated industrial management between plants

   supply of inputs mitigating the effects of downtime for maintenance

#### OPTIMIZATION OF MINING RESOURCES AND STRATEGIC INPUTS

- Maximizing the use of cementitious materials
- Primarization of natural gypsum operations (Ouricurí/PE)
- Utilization of mining resources between operations of CSN Group



### Pragmatic commitment in **sustainability and workplace safety** as a genuine value

#### **DECARBONIZATION JOURNEY**

#### **USE OF ALTERNATIVE FUELS**

Intensification of biomass and urban solid fuels.

#### **REDUCTION OF THE CLINKER/CEMENT FACTOR**

Maximize the use of cementitious products plus product portfolio adjustment.

#### **OPERATIONAL EFFICIENCY**

Use of Artificial Intelligence to optimize specific consumption in clinker kilns; use of hydrogen as a combustion catalyst in clinker kilns; 100% green electrical energy.



#### **SELF-SUFFICIENCY IN FUELS**



Expanding platform, with pillars aligned with circular economy concepts

#### SUBSTITUTION RATE FOR ALTERNATIVE FUELS





### **Agricultural Limestone:** Business Diversification

CSN'S ENTRANCE IN AGRO: MAXIMIZATION OF MINERAL RESOURCES WITH DIFFERENTIATED PROFITABILITY

#### **STRATEGIC RATIONALE**

Optimization of existing assets

Inorganic growth through M&As in regions with a strategic fit for cement and high agricultural potential

Relevant, high-growth market

#### **GROWTH PLAN**



### **CSN AGRO FOOTPRINT**



### 

### ...where are we going?

#### **ORGANIC GROWTH**

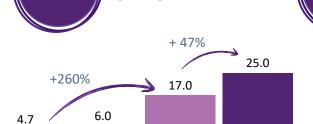






2021





Current

The new plants are born with the **best socio-environmental** indicators.

CAPEX

5<sub>bi</sub>

#### THROUGH M&A

2020

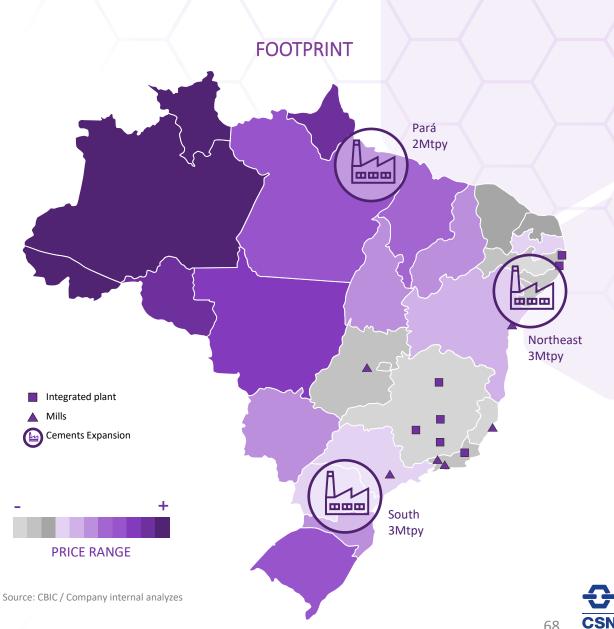
Positive track record of recent integrations, ensuring effective business gains

with Projects

M&A opportunities evaluation, reinforcing current positioning

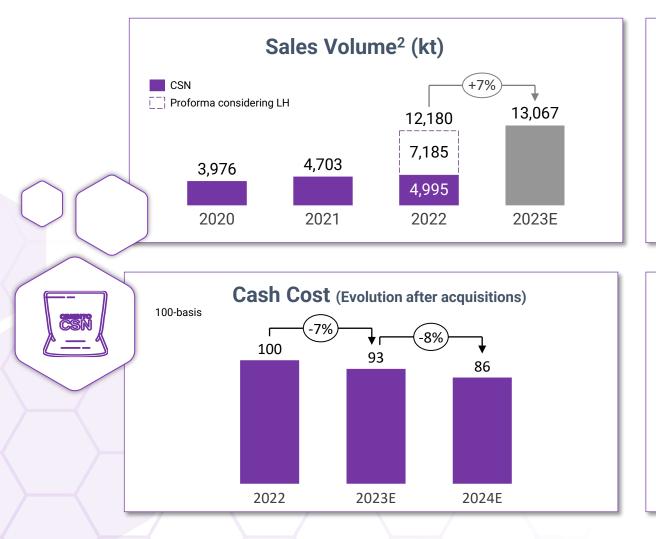
or entering new markets

Internacionalization

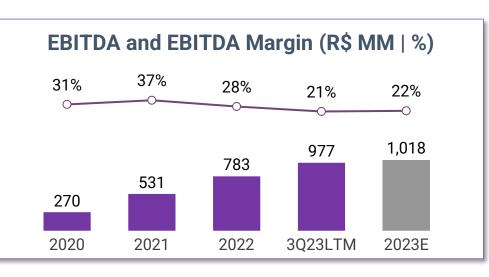




### Performance Highlights<sup>1</sup>







<sup>1</sup>Considers consolidation of Elizabeth as of Sep/21 and LafargeHolcim as of Sep/22 <sup>2</sup>Proforma considers LTM of LafargeHolcim operations

# CSNDAY

### Rogério Pizeta, Energy Executive Director





HPP Passo Real, RS

Companhia Siderúrgica Nac



### **CSN Energy**

EXPANSION ESTRATEGY CONSOLIDATION AND INTEGRATION BETWEEN BUSINESSES

### HIGHLIGHTS

- Self-suficiency in renewable Energy reached in 2023 with the benefit of self-production and synergy capture
- Consolidation as a player in the generation and commercialization of renewable energy
- Turnaround CEEE: Operational efficiency with cost reduction
- Progress in the development of Brownfields (CEEE) and Greenfields (Solar Floriano) expansion projects
- Reduction of CO2 emissions in CSN operations (2.5%) and I-REC certification

71 **CS** 

### **Asset Base** Overview

### Renweable and diverse plataform

### Hydraulic Generation

CEEE-G RS 1,275 MW

**HPP Itá** Aratiba/RS 428 MW

**HPP** Igarapava Igarapava/SP 120 MW

**HPP Quebra Queixo** Ipuaçu/SC 120 MW

SHPP Sacre II Brasnorte/MT 30 MW

#### Cogeneration UTEs: TRT, CTE1, CTE2

Volta Redonda/RJ 267 MW

### Wind Genration

**Povo Novo Wind Farm Project Rio Grande/RS** 52 MW

Wind Farm Ventos do Sul Osório/RS 15 MW

### **Photovoltaic Generation**

Floriano solar project Floriano/Pl 1,200 MW

CSN share: 117.9% | 248.75% | 398.9%

21 Hydraulic plants(1,743 MW) 3 Wind farms (15 MW) 3 Cogeneration Thermal Assets (267 MW) 3 Wind Farm Projects(52 MW) 1 Solar Project (1,200 MW)

capacity (MW)

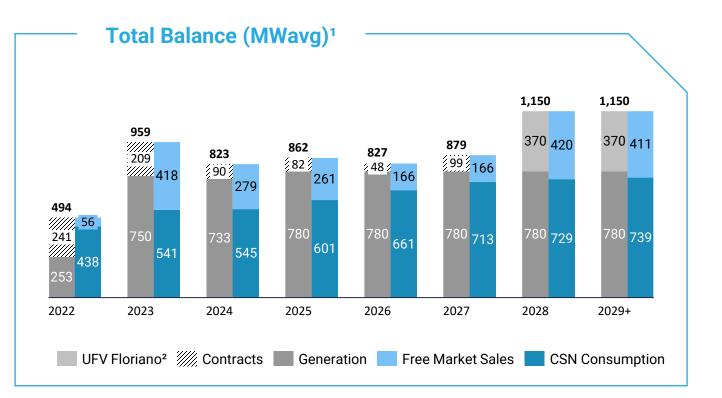
2,025

Installed

HPP Quebra Queixo,SC

 $\underset{\text{CMIN}}{\text{CSN}} DAY|_{\scriptscriptstyle R}^{\scriptscriptstyle R}$ 

#### **Energy Balance Sheet of CSN Energia**



#### Group self-sufficiency :

- Support for current demands, acquisitions and expansion projects
- Progressive replacement of legacy contracts by 2027



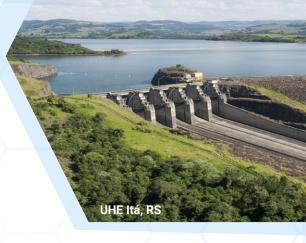
PCH Sacre II, MT GSF and Technical Losses effects considered Considering the authorization issued by ANEEL in Jan/24



#### **Synergies Capture and Return on Acquisitions**



<sup>1</sup>Long-term normalized energy sales price. <sup>3</sup>IIR indebtedness for PCH's Sacre and Santa Ana and UHE Quebra Queixo



**CEEE and HPP Quebra Queixo:** 

Allocation of self-production for all CSN businesses;

SHPP's Sacre/Santa Ana: Self-production and incentivized energy (reduction of TUSD/TUST) for Cement;

Achievement of all targets proposed for the acquisition of energy assets: 100% of self-production of renewable energy, cost reduction and relevant player on energy generation

Greater results are projected from the sale of surpluses in the long term with increased prices, along with increased synergies resulting from the increment in consumption

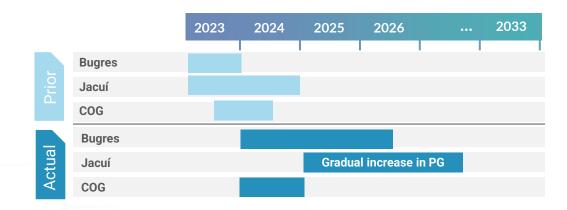
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#### **CSN**DAY

#### **Successful Integration – Post Privatization**

Actual Terms

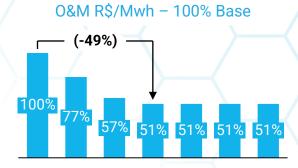
#### PROJECT SCHEDULE REVIEW



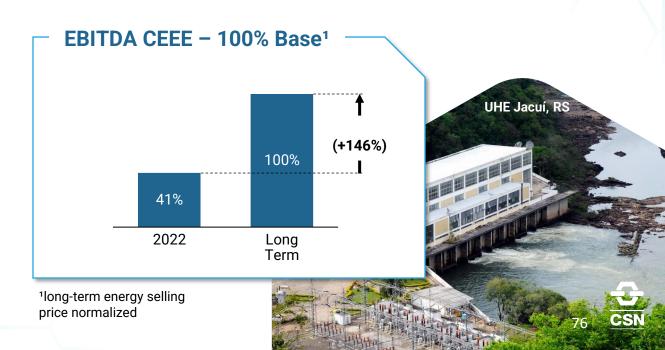
#### **CAPTURE OF SYNERGIES**

- Organizational restructuring with immediate cost reduction
- Restructuring of recurring service contracts

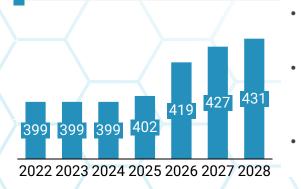




2022 2023 2024 2025 2026 2027 2028



#### GROSS PHYSICAL GUARANTEE



#### TEE (MWavg)

- Analysis of expansion projects, aiming to maximizing returns
- Review of CAPEX aligned with the future price curve and the Company's energy needs
- Expansions of PCHs aligned with the market window of opportunity

<sup>1</sup>Long-term normalized energy sales price



# FLORIANO COMPLEX

(\$) N



FLORIANO COMPLEX, with an installed capacity of 1,2 GW, in one of the regions with the best solar incidence in Brazil, resulting in a generation of around 370 MW on average, through 500 kV sectioning

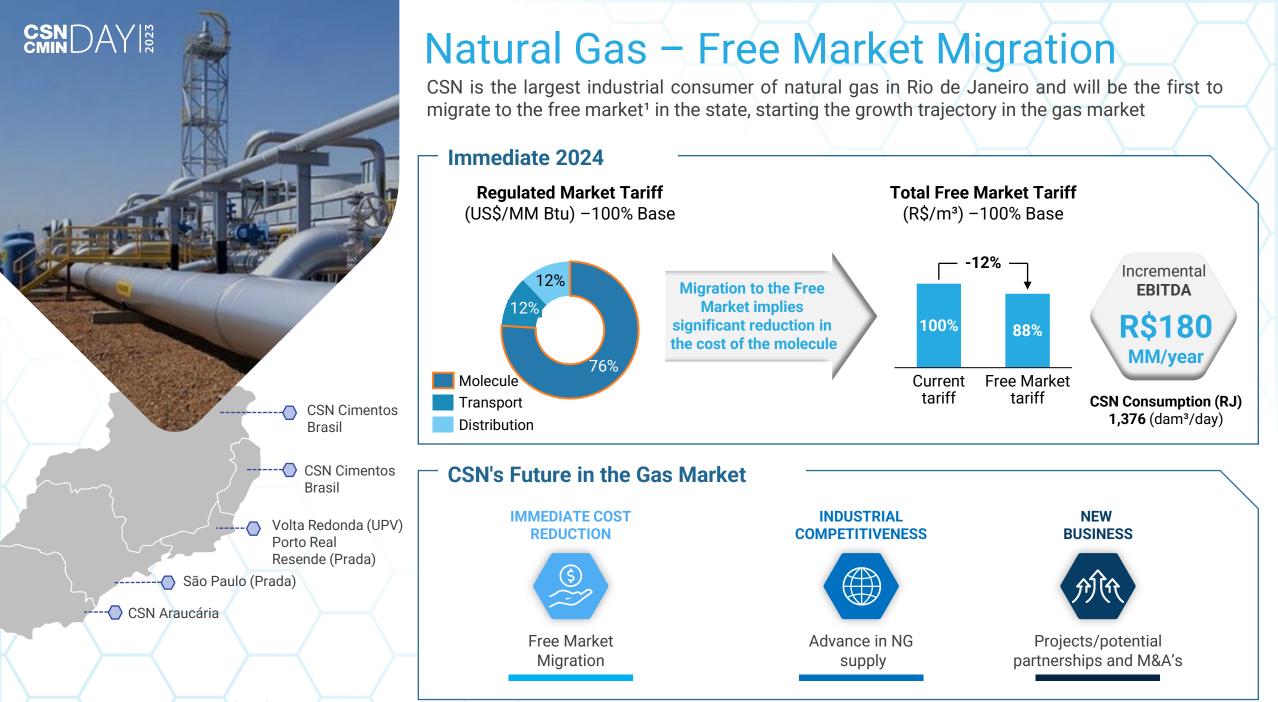
Concession requested in February/22 (under review by ANEEL)

Public hearing held on Aug/23 and PL renewed until 2025

I5 Incentive Energy (50% discount on TUSD/TUST)
 – implementation within 4 years after grant issuance

Solarimetric tower hired with the aim of enabling market mix (ACL x ACR)







# CSNDAY

Marcelo Ribeiro, CFO Tufi Daher, TLSA Executive Director





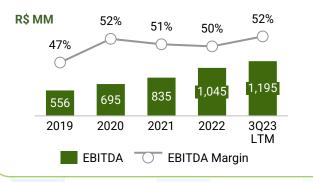
Companhia Siderúrgica Na



# Logistics business

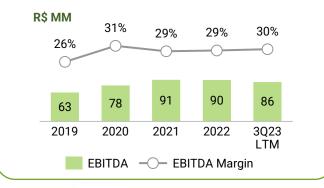


- Investments linked to the concession renewal until 2056 (R\$11Bi) will guarantee greater operational excellence and increased productivity
- The growth in ore transport and general cargo took MRS to a new level with a historical record
- Diversification and growth opportunity in general cargo (cellulose, construction and grains)



TECON

- Expansion of the terminal's machine park for steel operations with the acquisition of 6 large forklifts
- Cargo diversification and verticalization strategy of the logistics chain (oil & gas)
- Retroarea as an enhancer of new business





- Network modernization continuity with impacts on the results' growth
- Grain transportation kickoff and entry of FTL as a logistical alternative for agribusiness in Maranhão
- Growth in fees depending on the mixed load without an increase in fixed expenses greater profitability



<sup>1</sup>Participation of 37.27%

#### Transnordestina

#### FUNDAMENTAL LINK TO BOOST THE NORTHEASTERN ECONOMY AND BRING BRAZIL CLOSER TO THE MAIN WORLD MARKETS



0 0 World-Class Railway 1,209 km of extension Grains, fertilizers, iron ore, cement and fuels transportation **Fast-paced constructions** 68% physical progress of works Start-up in 2027 Average annual EBITDA generation of ~R\$3.5 Billion

80 CSN



#### Transnordestina

Industrial plant – Salgueiro (PE)

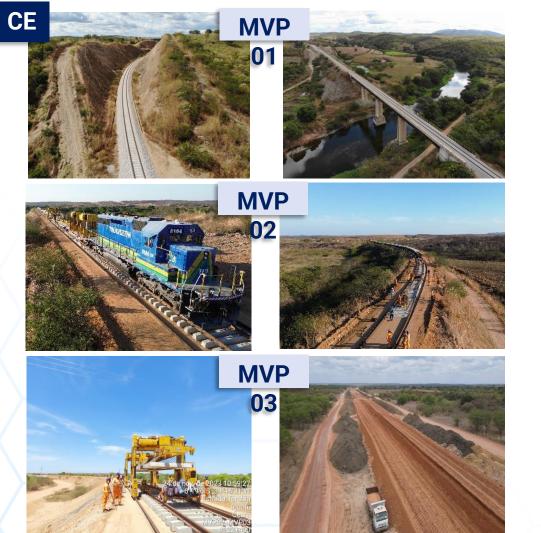




81 CSN

# Transnordestina

Ceará and Piauí Photographic Records (Superstructure and Infrastructure)









PI







# CSNDAY

Marcelo Ribeiro, CFO





Companhia Siderúrgica Nac



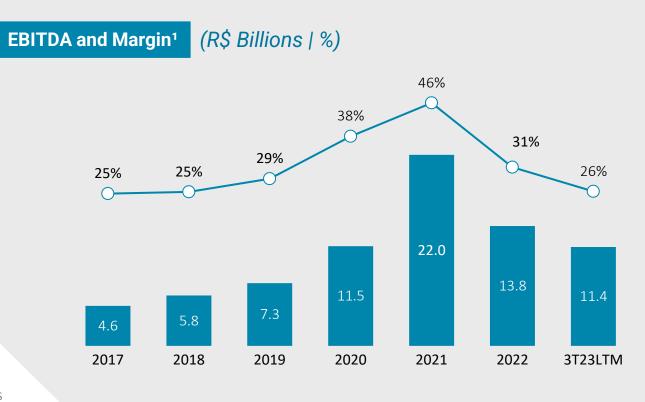
Even with a challenging year in the steel industry, results remained at a new level

Recent M&A's have brought diversification, competitiveness and resilience

Significant improvements are expected in the future in each of the businesses



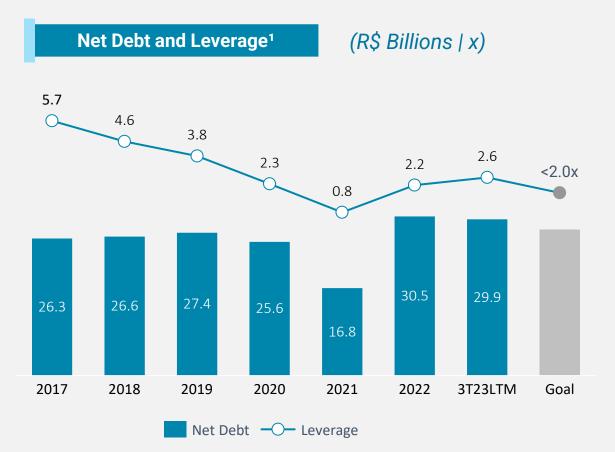
## **Resilient Results**



EBITDA -O- EBITDA Margin



# **Countinuous commitment** with deleveraging



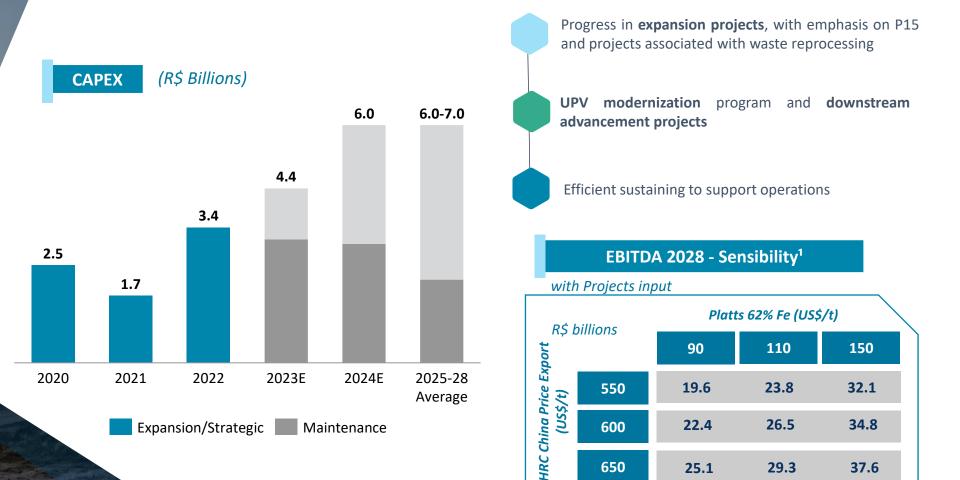
01 The perspective of better results will allow the leverage reduction 02 Acceleration alternatives: Capital Recycling 03 Efficient and disciplined capital allocation, with normalization of dividends

85 CSN

#### 

#### Multiannual CAPEX: Towards Transformation

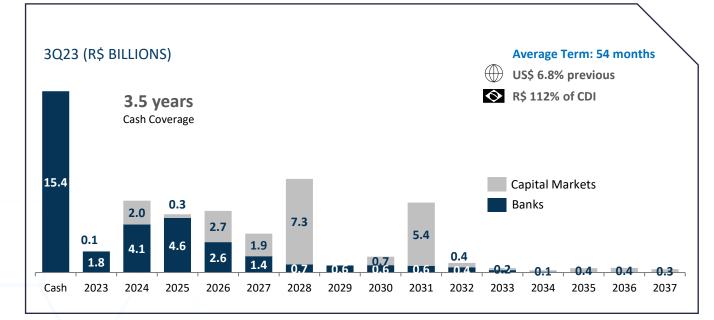
INVESTMENT PLAN CONTINUITY WITH A FOCUS ON GROWTH, COMPETITIVENESS AND VALUE AGGREGATION

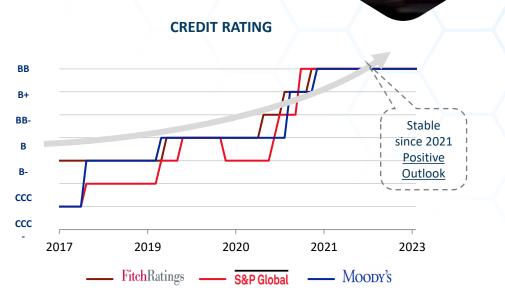


<sup>1</sup>Estimate considers full projects ramp-up and long-term commodity prices (real terms)



#### **Debt Profile**





# DEBT COMPOSITION Banks 41% 34% Bonds 25% Debentures US\$ 61% 39% R\$

#### R\$ 18,7bi captured in 2023LTM

- CEEE-G Bridge Loan of R\$1.9bi
- Institutional Debentures of R\$600MM
- 12,431 Debenture of R\$700MM
- R\$ 2.5 bi of Bonds
- ECA JBIC/NEXI R\$7bi for disbursement in the following 2 years
- Iron Ore Prepayments of R\$5bi (off-debt)
- Structured Energy Operations of R\$1.0bi (off-debt)

#### Next steps: Cost-efficient long-term financing

- Multilaterals: CSN Mineração and CSN Cimentos Brasil
- Infrastructure Debentures: CSN, CMIN and CEEE-G
- BNDES and FINEP: CSN



# Reaffirmation of the **Investment Thesis**

**CLEAR OPPORTUNITY TO CREATE VALUE FOR SHAREHOLDERS** 

#### **COMMODITIES EXPOSITION**















# CSN CMIN



December 14, 2023

