



Sigma Lithium:


*A Planta Industrial de
Processamento de Óxido de
Lítio mais Avançada e
Sustentável*

Minas Gerais, Brasil



 Nasdaq: SGML

 TSX: SGML

 B3: S2GM34

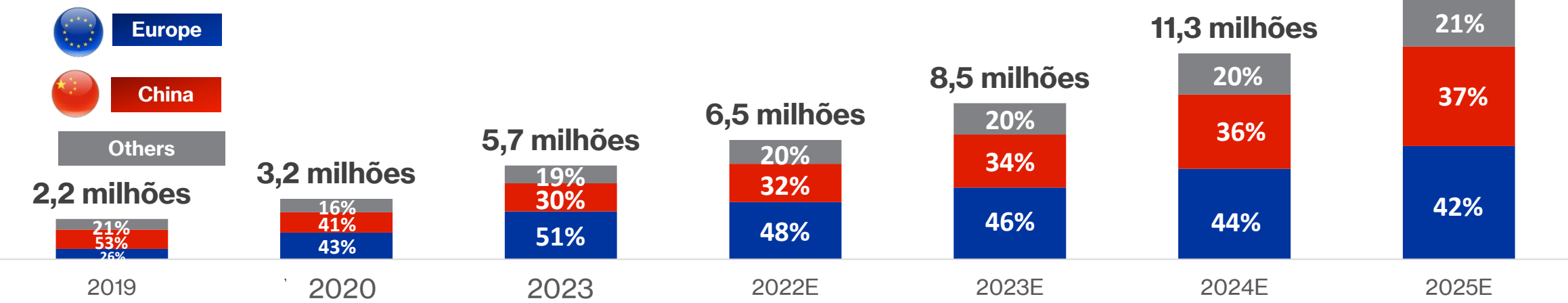


Explicando o Lítio: Demanda Cresce Significativamente

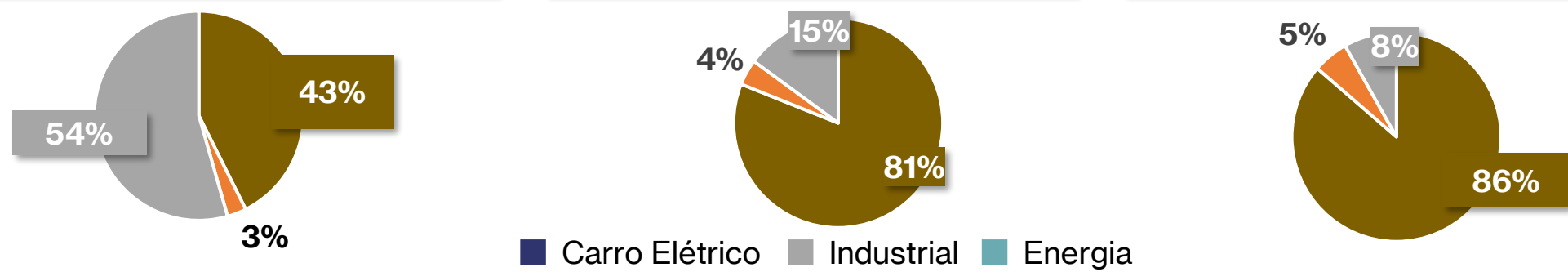


O Crescimento de Carros Elétricos na Europa = Oportunidade da Economia Verde para o Brasil

Carros Elétricos e Market Share (%)

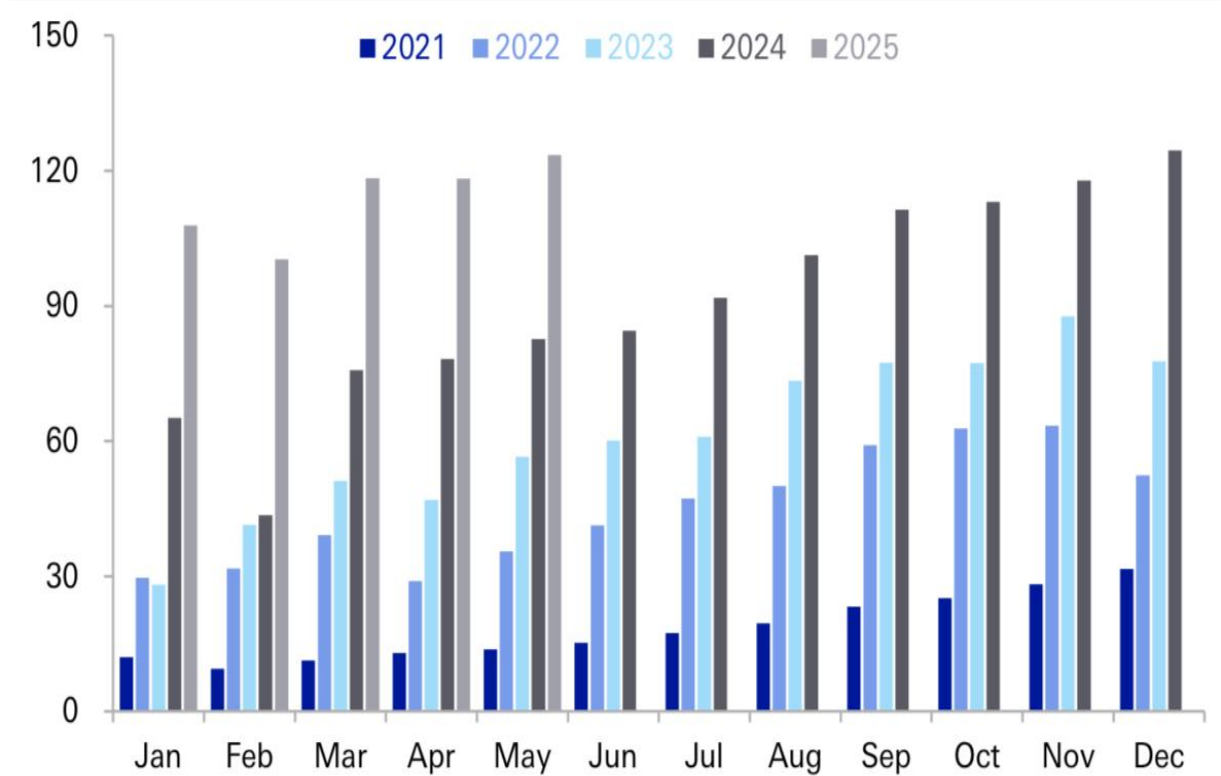


Consumo Global de Lítio



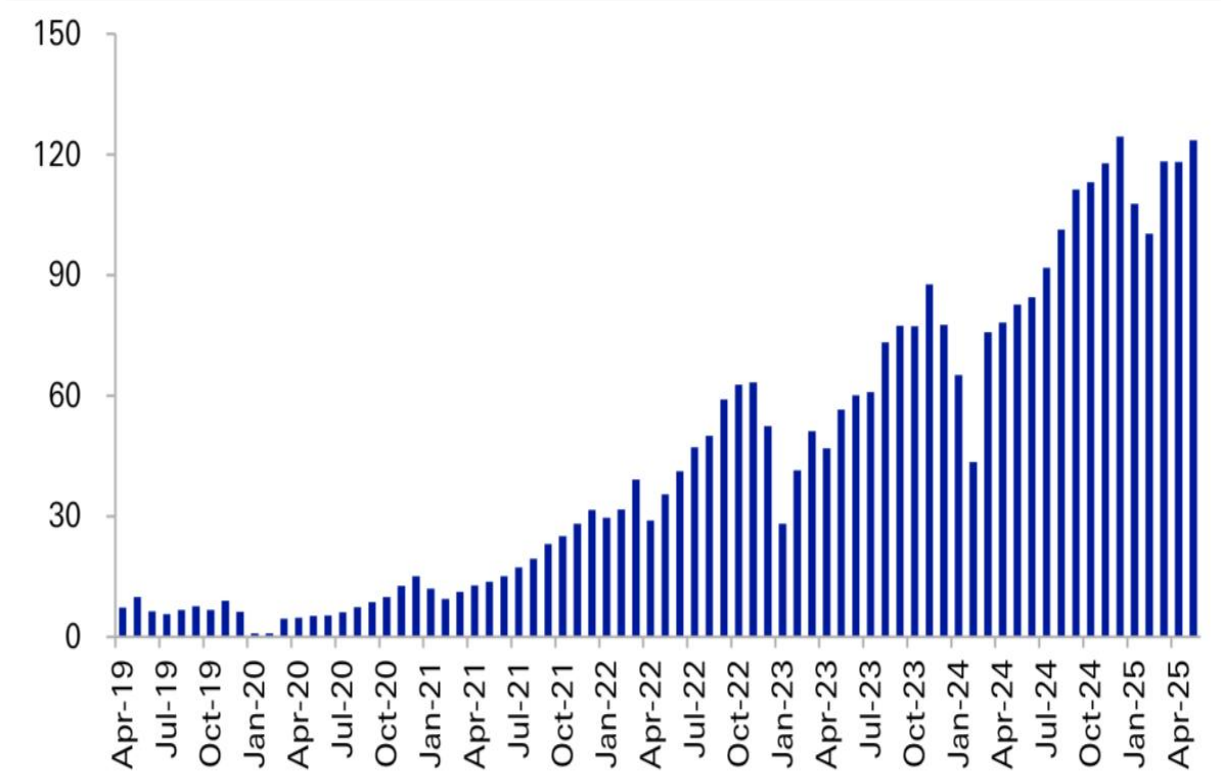
Crescimento Imparável da Demanda: Baterias de Íon-Lítio para Veículos Elétricos e Armazenamento de Energia Cresceram 49% em Maio

Produção de Baterias para EV e ESS na China



Source : Deutsche Bank

Produção de Baterias para EV e ESS na China Aumentou 4% no Mês e 49% no Ano



Source : Deutsche Bank

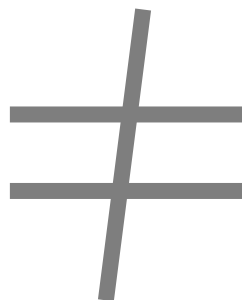
Então o Lítio é Crítico?

 **Sim é Crítico**

- Difícil de Substituir
- Abundante e Barato

Exemplos

- Lítio
- Minério de Ferro

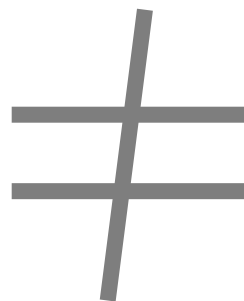
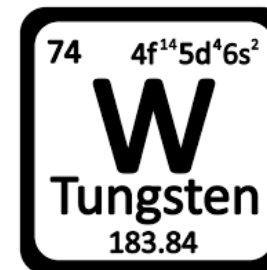


Não é Estratégico

- Raro
- Localização Limitada
- Caro

Exemplo

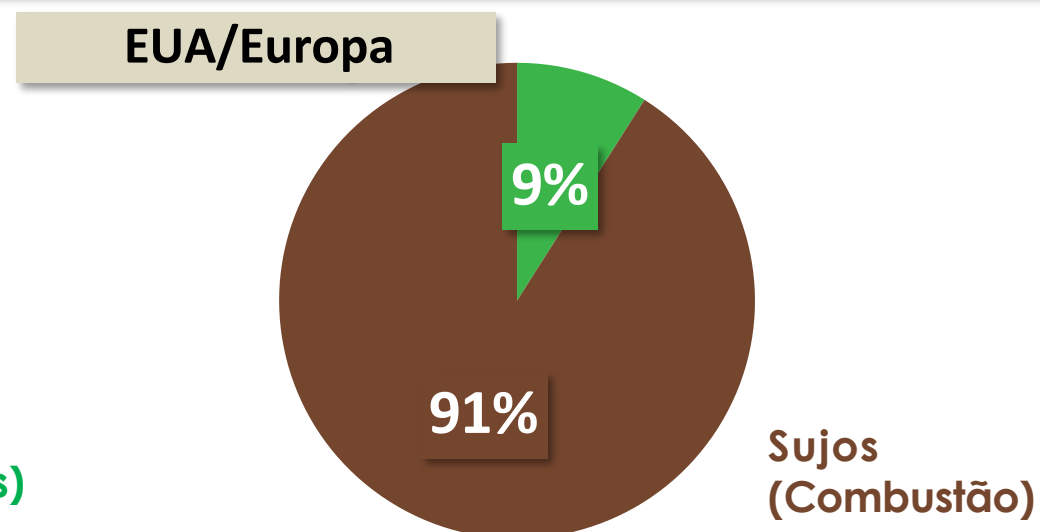
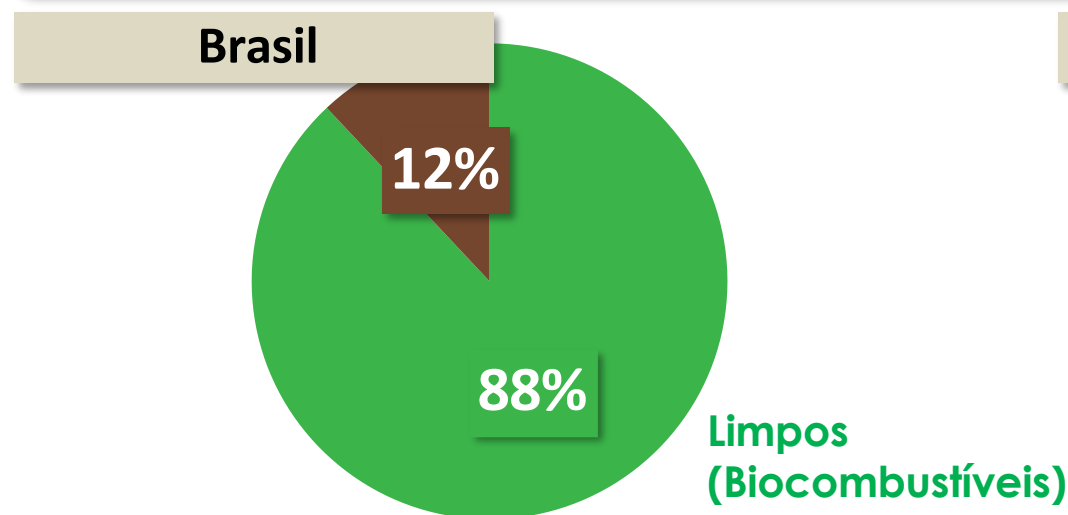
- Terras Raras




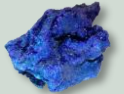



Mas vai Faltar Lítio para o Brasil se Exportarmos ?

✗ Não

- ✓ **Exportação é vital para a viabilidade econômica das pesquisas minerais e a sua expansão (alto custo)**
- ✓ **Brasil é líder mundial de biocombustíveis**
- ✓ **Carros a etanol/gás natural são sucesso global de descarbonização**



O Mundo Exigirá um Aumento Significativo na Capacidade de Processamento de Materiais para Baterias e Mineração

			2022 Supply < 2035 Demand		New Projects For 2035 Demand
EV Battery Cathode	Lithium		678,000 t	4,000,000 t	74
	Cobalt		177,000 t	489,000 t	62
	Nickel		3,160,000 t	6,200,000 t	72
EV Battery Anode	Natural Graphite		1,110,000 t	7,210,000 t	97
	Synthetic Graphite		2,100,000 t	5,200,000 t	54

Improve all Steps of Battery Materials Industrial Process to Make Each of them as:

- ✓ *Energy Efficient*
- ✓ *Water Efficient*
- ✓ *Land Use Efficient*
- ✓ *Carbon Efficient*

✓ **The Most Sustainable and With Circularity**

Disclaimer

(1/2)

No Offer or Solicitation Regarding Securities

This presentation has been prepared by Sigma Lithium Corporation ("Sigma") for general information purposes only and does not constitute an offer to sell or a solicitation of an offer to buy any securities of Sigma or its affiliates in any jurisdiction, including but not limited to Canada and the United States. The contents of this presentation should not be interpreted as financial, investment, tax, legal, or accounting advice. Readers should consult their own advisors.

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Cautionary Note Regarding Forward-Looking Statements

This presentation contains "forward-looking information" within the meaning of applicable Canadian securities legislation and "forward-looking statements" within the meaning of applicable United States securities laws (collectively referred to herein as "Forward Looking Information"). All such Forward Looking Information is made under the provisions of the U.S. Private Securities Litigation Reform Act of 1995, Section 27A of the U.S. Securities Act of 1933, as amended and Section 21E of the U.S. Securities Exchange Act of 1934, as amended. All statements, other than statements of historical fact, may be Forward Looking Information, including, but not limited to, mineral resource or mineral reserve estimates (which reflect a prediction of mineralization that would be realized by development). When used in this presentation, such statements generally use words such as "may", "would", "could", "will", "intend", "expect", "believe", "plan", "anticipate", "estimate" and other similar terminology. These statements reflect management's current expectations regarding future events and operating performance and speak only as of the date such statements were made. Forward Looking Information involves significant risks and uncertainties, should not be read as guarantees of future performance or results, and does not necessarily provide accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to differ materially from the results discussed in the Forward-Looking Information, which is based upon what management believes are reasonable assumptions, and there can be no assurance that actual results will be consistent with the Forward-Looking Information.

In particular (but without limitation), this presentation contains Forward Looking Information with respect to the following matters: the lithium sector and long-term outlook thereof; the growth of European electric vehicle ("EV") demand; anticipated trends relating to lithium structural supply tightness; development, construction and large scale production at Sigma's Grota do Cirilo Lithium Project (the "Project") and the phases and timing thereof; sustainability and environmental initiatives and the continued success thereof; processing production costs and other cost estimates; the quality and grades of lithium concentrates; publishing of additional pre-feasibility and feasibility studies; expansion of mineral resources and mineral reserves at the Project; intentions to fund construction using debt from commercial and development banks; anticipated start-up costs at the Project; relationships with engineering and construction companies; anticipated risk mitigation and execution plans; the adherence by Sigma to global environmental guidance; and economic performance, financial projections and requirements, and other expectations of Sigma. In addition, documents referred to in this presentation and filed publicly by Sigma may contain further Forward-Looking Information with respect to the following matters: anticipated decision making with respect to the Project; capital expenditure programs; estimates of mineral resources and mineral reserves; development of mineral resources and mineral reserves; government regulation of mining operations and treatment under governmental and taxation regimes; the future price of commodities, including lithium; the realization of mineral resource and mineral reserve estimates, including whether mineral resources will ever be developed into mineral reserves; the timing and amount of future production; entering into binding offtake arrangements; currency exchange and interest rates; expected outcome and timing of environmental surveys and permit applications and other environmental matters; Sigma's ability to raise capital and obtain project financing; expected expenditures to be made by Sigma on its properties; successful operations and the timing, cost, quantity, capacity and quality of production; capital costs, operating costs and sustaining capital requirements, including the cost of construction of the processing plant for the Project; competitive conditions and anticipated trends post-COVID-19 pandemic and the ongoing uncertainties and effects in respect of the COVID-19 pandemic.

Forward Looking Information does not take into account the effect of transactions or other items announced or occurring after the statements are made. Forward Looking Information is based upon a number of expectations and assumptions and is subject to a number of risks and uncertainties, many of which are beyond Sigma's control, that could cause actual results to differ materially from those disclosed in or implied by such Forward Looking Information. With respect to the Forward Looking Information, Sigma has made assumptions regarding, among other things: General economic and political conditions; Stable and supportive legislative, regulatory and community environment in the jurisdictions where Sigma operates; Stability and inflation of the Brazilian Real, including any foreign exchange or capital controls which may be enacted in respect thereof, and the effect of current or any additional regulations on Sigma's operations; Anticipated trends and effects in respect of the COVID-19 pandemic and post-pandemic; Demand for lithium, including that such demand is supported by growth in the EV market; Estimates of, and changes to, the market prices for lithium; The impact of increasing competition in the lithium business and Sigma's competitive position in the industry; Sigma's market position and future financial and operating performance; Sigma's estimates of mineral resources and mineral reserves, including whether mineral resources will ever be developed into mineral reserves; Anticipated timing and results of exploration, development and construction activities; Reliability of technical data; Sigma's ability to develop and achieve production at the Project; Sigma's ability to obtain financing on satisfactory terms to develop the Project; Sigma's ability to obtain and maintain mining, exploration, environmental and other permits, authorizations and approvals for the Project; The timing and possible outcome of regulatory and permitting matters for the Project; The exploration, development, construction and operational costs for the Project; The accuracy of budget, construction and operations estimates for the Project; Successful negotiation of definitive commercial agreements, including off-take agreements for the Project; Sigma's ability to operate in a safe and effective manner.

Although management believes that the assumptions and expectations reflected in such Forward-Looking Information are reasonable, there can be no assurance that these assumptions and expectations will prove to be correct. Since Forward Looking Information inherently involves risks and uncertainties, undue reliance should not be placed on such information. Sigma's actual results could differ materially from those anticipated in any Forward-Looking Information as a result of various known and unknown risk factors, including (but not limited to) the risk factors referred to under the heading "Risk Factors" in the most recent amended and restated annual information form of Sigma. Such risks relate to, but are not limited to, the following: Sigma may not develop the Project into a commercial mining operation; There can be no assurance that market prices for lithium will remain at current levels or that such prices will improve; The market for EVs and other large format batteries currently has limited market share and no assurances can be given for the rate at which this market will develop, if at all, which could affect the success of Sigma and its ability to develop lithium operations; Changes in technology or other developments could result in preferences for substitute products; New production of lithium hydroxide or lithium carbonate from current or new competitors in the lithium markets could adversely affect prices; The Project is at development stage and Sigma's ability to succeed in progressing through development to commercial operations will depend on a number of factors, some of which may be outside its control; Sigma's financial condition, operations and results of any future operations are subject to political, economic, social, regulatory and geographic risks of doing business in Brazil; Violations of anti-corruption, anti-bribery, anti-money laundering and economic sanctions laws and regulations could materially adversely affect Sigma's business, reputation, results of any future operations and financial condition; Sigma is subject to regulatory frameworks applicable to the Brazilian mining industry which could be subject to further change, as well as government approval and permitting requirements, which may result in limitations on Sigma's business and activities; Sigma's operations are subject to numerous environmental laws and regulations and expose Sigma to environmental compliance risks, which may result in significant costs and have the potential to reduce the profitability of operations; Physical climate change events and the trend toward more stringent regulations aimed at reducing the effects of climate change could have an adverse effect on Sigma's business and future operations; As Sigma does not have any experience in the construction and operation of a mine, processing plants and related infrastructure, it is more difficult to evaluate Sigma's prospects, and Sigma's future success is more uncertain than if it had a more proven history of developing a mine; Sigma's future production estimates are based on existing mine plans and other assumptions which change from time to time. No assurance can be given that such estimates will be achieved; Sigma may experience unexpected costs and cost overruns, problems and delays during construction, development, mine start-up and operations for reasons outside of Sigma's control, which have the potential to materially affect its ability to fully fund required expenditures and/or production or, alternatively, may require Sigma to consider less attractive financing solutions; Sigma's capital and operating cost estimates may vary from actual costs and revenues for reasons outside of Sigma's control; Sigma's operations are subject to the high degree of risk normally incidental to the exploration for, and the development and operation of, mineral properties; Insurance may not be available to insure against all such risks, or the costs of such insurance may be uneconomic. Losses from uninsured and underinsured losses have the potential to materially affect Sigma's financial position and prospects; Sigma is subject to risks associated with securing title and property interests; Sigma is subject to strong competition in Brazil and in the global mining industry; Sigma may become subject to government orders, investigations, inquiries or other proceedings (including civil claims) relating to health and safety matters, which could result in consequences material to its business and operations; Sigma's mineral resource and mineral reserve estimates are estimates only and no assurance can be given that any particular level of recovery of minerals will in fact be realized or that identified mineral resources or mineral reserves will ever qualify as a commercially mineable (or viable) deposit; Sigma's operations and the development of its projects may be adversely affected if it is unable to maintain positive community relations; Sigma is exposed to risks associated with doing business with counterparties, which may impact (...)

Disclaimer

(2/2)

Sigma's operations and financial condition; Any limitation on the transfer of cash or other assets between Sigma and Sigma's subsidiaries, or among such entities, could restrict Sigma's ability to fund its operations efficiently; Sigma is subject to risks associated with its reliance on consultants and others for mineral exploration and exploitation expertise; The current COVID-19 pandemic could have a material adverse effect on Sigma's business, operations, financial condition and stock price; If Sigma is unable to ultimately generate sufficient revenues to become profitable and have positive cash flows, it could have a material adverse effect on its prospects, business, financial condition, results of operations or overall viability as an operating business Sigma is subject to liquidity risk and therefore may have to include a "going concern" note in its financial statements; Sigma may not be able to obtain sufficient financing in the future on acceptable terms, which could have a material adverse effect on Sigma's business, results of operations and financial condition. In order to obtain additional financing, Sigma may conduct additional (and possibly dilutive) equity offerings or debt issuances in the future; Sigma may be unable to achieve cash flow from operating activities sufficient to permit it to pay the principal, premium, if any, and interest on Sigma's indebtedness, or maintain its debt covenants; Sigma has not declared or paid dividends in the past and may not declare or pay dividends in the future; Sigma will incur increased costs as a result of being a public company both in Canada listed on the TSXV and in the United States listed on Nasdaq, and its management will be required to devote further substantial time to United States public company compliance efforts; If Sigma does not maintain adequate and appropriate internal controls over financial reporting as outlined in accordance with National Instrument 52-109 – Certification of Disclosure in Issuers' Annual and Interim Filings or the rules and regulations of the U.S. Securities and Exchange Commission (the "SEC"), Sigma will have to report a material weakness and disclose that Sigma has not maintained appropriate internal controls over financial reporting; As a foreign private issuer, Sigma is subject to different U.S. securities laws and rules than a domestic U.S. issuer, which may limit the information publicly available to its shareholders; Failure to retain key officers, consultants and employees or to attract and, if attracted, retain additional key individuals with necessary skills could have a materially adverse impact upon Sigma's success; Sigma is subject to currency fluctuation risks; From time to time, Sigma may become involved in litigation, which may have a material adverse effect on its business financial condition and prospects; Certain directors and officers of Sigma are, or may become, associated with other natural resource companies which may give rise to conflicts of interest; The market price for Sigma's shares may be volatile and subject to wide fluctuations in response to numerous factors beyond its control, and Sigma may be subject to securities litigation as a result; If securities or industry analysts do not publish research or reports about Sigma's business, or if they downgrade the common shares of Sigma (the "Common Shares"), the price of the Common Shares could decline; Sigma will have broad discretion over the use of the net proceeds from offerings of its securities; There is no guarantee that the Common Shares will earn any positive return in the short term or long term; Sigma has a major shareholder which owns 47.7% of the outstanding Common Shares and, as such, for as long as such shareholder directly or indirectly maintains a significant interest in Sigma, it may be in a position to affect Sigma's governance, operations and the market price of the Common Shares; As Sigma is a Canadian corporation but most of its directors and officers are not citizens or residents of Canada or the U.S., it may be difficult or impossible for an investor to enforce judgements against Sigma and its directors and officers outside of Canada and the U.S. which may have been obtained in Canadian or U.S. courts or initiate court action outside Canada or the U.S. against Sigma and its directors and officers in respect of an alleged breach of securities laws or otherwise. Similarly, it may be difficult for U.S. shareholders to effect service on Sigma to realize on judgments obtained in the United States; Sigma is governed by the corporate and securities laws of the Province of Ontario and of Canada, which in some cases have a different effect on shareholders than U.S. corporate laws and U.S. securities laws; Sigma is subject to risks associated with its information technology systems and cyber-security; Sigma may be a Passive Foreign Investment Company, which may result in adverse U.S. federal income tax consequences for U.S. holders of Common Shares.

Readers are cautioned that the foregoing lists of assumptions and risks is not exhaustive. The Forward-Looking Information contained in this presentation is expressly qualified by these cautionary statements. All Forward Looking Information in this presentation speaks as of the date of such statements were made, as applicable. Sigma does not undertake any obligation to update or revise any Forward-Looking Information, whether as a result of new information, future events or otherwise, except as required by applicable securities law. Additional information about these assumptions, risks and uncertainties is contained in Sigma's filings with securities regulators, including Sigma's then-current annual information form, which are available on SEDAR at www.sedar.com. and on EDGAR at www.sec.gov.

Cautionary Note Regarding Mineral Resource and Mineral Reserve Estimates

Technical disclosure regarding Sigma's properties included in this presentation has not been prepared in accordance with the requirements of U.S. securities laws. Without limiting the foregoing, such technical disclosure uses terms that comply with reporting standards in Canada and estimates are made in accordance with National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101"). Unless otherwise indicated, all mineral reserve and mineral resource estimates contained in the technical disclosure have been prepared in accordance with NI 43-101 and the Canadian Institute of Mining, Metallurgy and Petroleum Definition Standards on Mineral Resources and Reserves (the "CIM Definition Standards").

Under the SEC rules regarding disclosure of technical information, the definitions of "proven mineral reserves" and "probable mineral reserves" are substantially similar to the corresponding CIM Definition Standards, and the SEC recognizes "measured mineral resources", "indicated mineral resources" and "inferred mineral resources" which are also substantially similar to the corresponding CIM Definition Standards. However, there are still differences in the definitions and standards under the SEC rules and the CIM Definition Standards. Therefore, Sigma's mineral resources and reserves as determined in accordance with NI 43-101 may be significantly different than if they had been determined in accordance with the SEC rules.

Third Party Information

This presentation includes market, industry, economic data and projections which was obtained from various publicly available sources and other sources believed by Sigma to be true. Although Sigma believes it to be reliable, it has not independently verified any of the data from third party sources referred to in this presentation or analyzed or verified the underlying reports relied upon or referred to by such sources, or ascertained the underlying economic and other assumptions relied upon by such sources. Sigma believes that the market, industry and economic data is accurate and that the estimates and assumptions are reasonable, but there can be no assurance as to the accuracy or completeness thereof. The accuracy and completeness of the market, industry and economic data in this presentation are not guaranteed, and Sigma does not make any representation as to the accuracy or completeness of such information.

Technical Information

Wes Roberts, P.Eng., a member of the technical committee of Sigma, is the "qualified person" under NI 43-101 who reviewed and approved the technical information disclosed in this presentation.

Certain technical information in this presentation was derived from the technical report dated June 12, 2023, with an effective date of October 31, 2022, titled "Grota do Cirilo Lithium Project, Araçuaí and Itinga Regions, Minas Gerais, Brazil, Amended and Restated Technical Report" and prepared by Homero Delboni Jr, B.E., M.Eng.Sc., Ph.D., Marc-Antoine Laporte, P. Geo, Jarrett Quinn, P.Eng., Porifrio Cabaleiro Rodriguez, MEng., and Noel O'Brien, B.E., MBA, F AusIMM (the "Updated Technical Report"). The Updated Technical Report is available on the SEDAR profile of Sigma at www.sedar.com. Mineral resources in the Updated Technical Report are reported inclusive of mineral reserves. Readers are advised that mineral resources that are not mineral reserves do not have demonstrated economic viability. Some figures herein have been rounded for presentation purposes. It is noted that Sigma has not yet made a production decision in respect of the Barreiro deposit. Sigma expects that it will assess the results of a definitive feasibility study before making a production decision in respect of the Barreiro deposit. All statements regarding mine development or production in respect of the Barreiro deposit in this presentation are expressly qualified by this statement.

Non-GAAP Measures

This presentation and the Updated Feasibility Study Report contain certain non-GAAP measures. The non-GAAP measures do not have any standardized meaning within IFRS and therefore may not be comparable to similar measures presented by other companies. These measures provide information that is customary in the mining industry and that is useful in evaluating the Project. This data should not be considered as a substitute for measures of performance prepared in accordance with IFRS.

Dois “Brasis”: Pre-Liberalizacao de Exportacao de Litio e Pos Liberalizacao

Seguranca Juridica Transformou o Vale do Jequitinhonha

E Potencial ... Todo o Semi Arido no Nordeste



Atualizar o Decreto do Lítio Foi Vital Para o Brasil

SUGESTÃO DE ALTERAÇÃO DO DECRETO DO LÍTIO

DECRETO Nº 10.577, DE 14 DE DEZEMBRO DE 2020

Altera o Decreto nº 10.577, 14 de dezembro de 2020, que alterou o Decreto nº 19.967, de 16 de dezembro de 1997, o qual dispõe sobre as atribuições da Comissão Nacional de Energia Nuclear de nas atividades de industrialização de minerais e minérios de lítio e seus derivados.

O PRESIDENTE DA REPÚBLICA, no uso das atribuições que lhe conferem o art. 144, inciso "a", da Constituição, e tendo em vista o disposto no art. 1º, parágrafo único, da Lei nº 4.118, de 27 de agosto de 1963, e no art. 1º, parágrafo único, da Lei nº 51.726, de 19 de fevereiro de 1963,

Artigo 1º. O Decreto nº 2.413, de 4 de dezembro de 1996, passa a vigorar com as seguintes alterações:

“Art 1º. As atividades de industrialização, importação, exportação, armazenamento, distribuição e uso de minerais e minérios de lítio, de produtos orgânicos e inorgânicos, inclusive suas composições, fabricados à base de lítio, de lítio e de seus derivados, todos com finalidade química ou química, o químico lítio considerado de interesse para a energia nuclear, observarão os procedimentos estabelecidos no presente decreto.

Parágrafo Único. Não serão considerados de interesse nuclear:

I – o concentrado de lítio [LiAl(Si₂O₆)];

II – os seguintes compostos de lítio:

- (a) Sulfato de Lítio [Li₂SO₄]**
- (b) Hidróxido de Lítio [LiOH]**
- (c) Hidróxido de Lítio Monohidratado [LiOH·H₂O]**
- (d) Carbonato de Lítio [Li₂CO₃]**
- (e) Cloreto de Lítio [LiCl]**

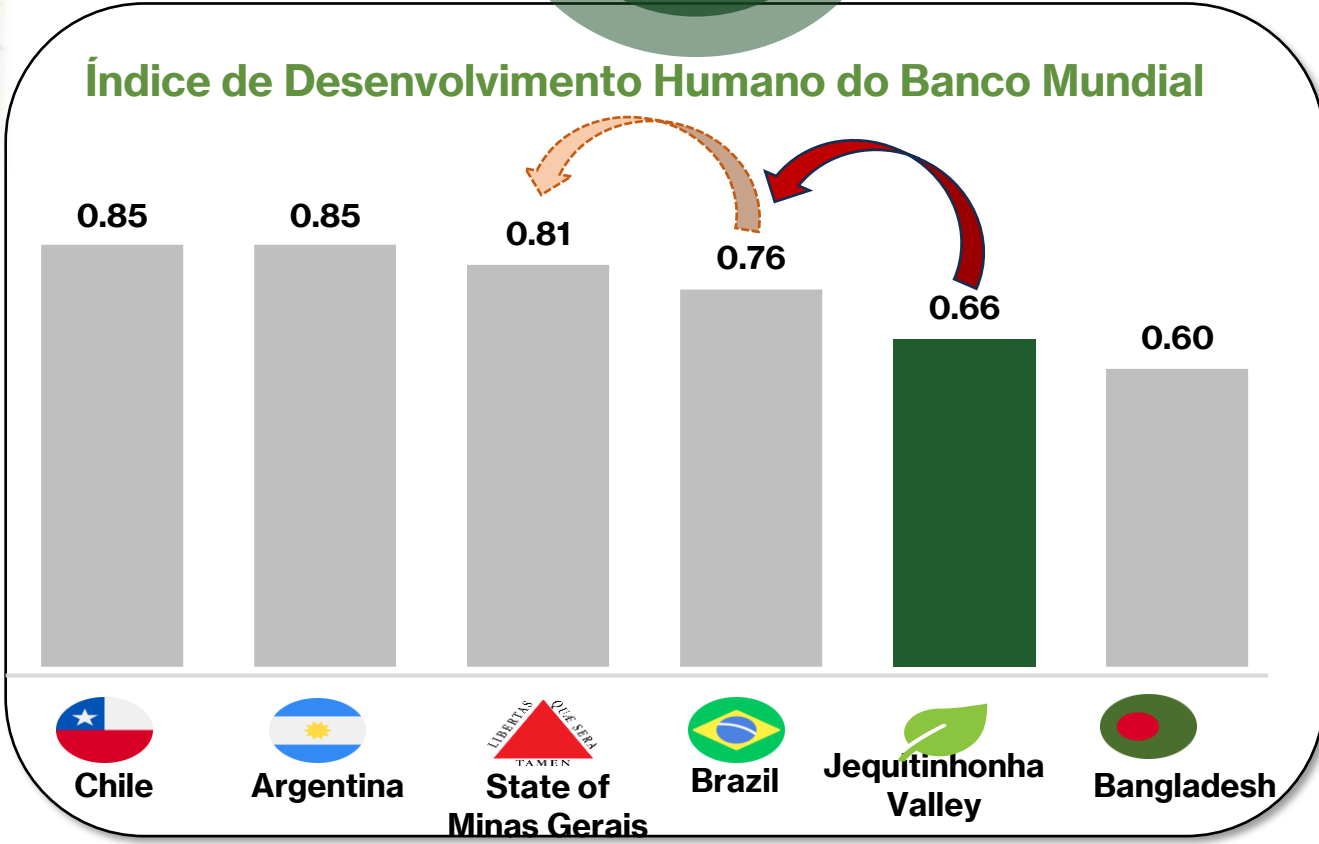
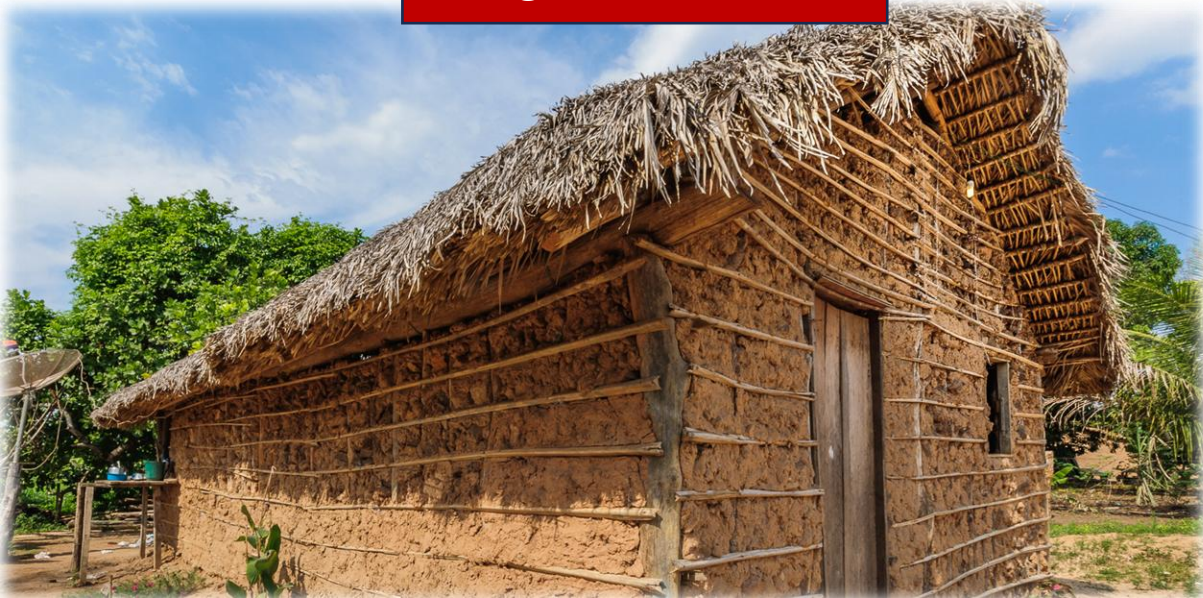
Art. 2º Até 31 de dezembro de 2030 as operações de importação, exportação, armazenamento, distribuição e uso de minerais e minérios de lítio e seus derivados somente serão realizadas mediante prévia autorização da Comissão Nacional de Energia Nuclear.

§ 1º A autorização prévia da Comissão Nacional de Energia Nuclear será concedida mediante análise da origem, da destinação e do emprego que se pretenda dar ao produto, independentemente do País de origem, da destinação e do emprego que se pretenda dar ao produto, independente do País de origem, da destinação e do emprego que se pretenda dar ao produto.

Prosperidade Compartilhada: Aliança Coletiva



Sigma: 13 Anos





1,700

Empregos Diretos

18,000

Empregos Indiretos

21,000

Postos de Trabalho

18,000

**Pessoas com Acesso a
Água Potável**

85%

Força de Trabalho Local

50%

**População
Economicamente Ativa
Beneficiada**

270,000

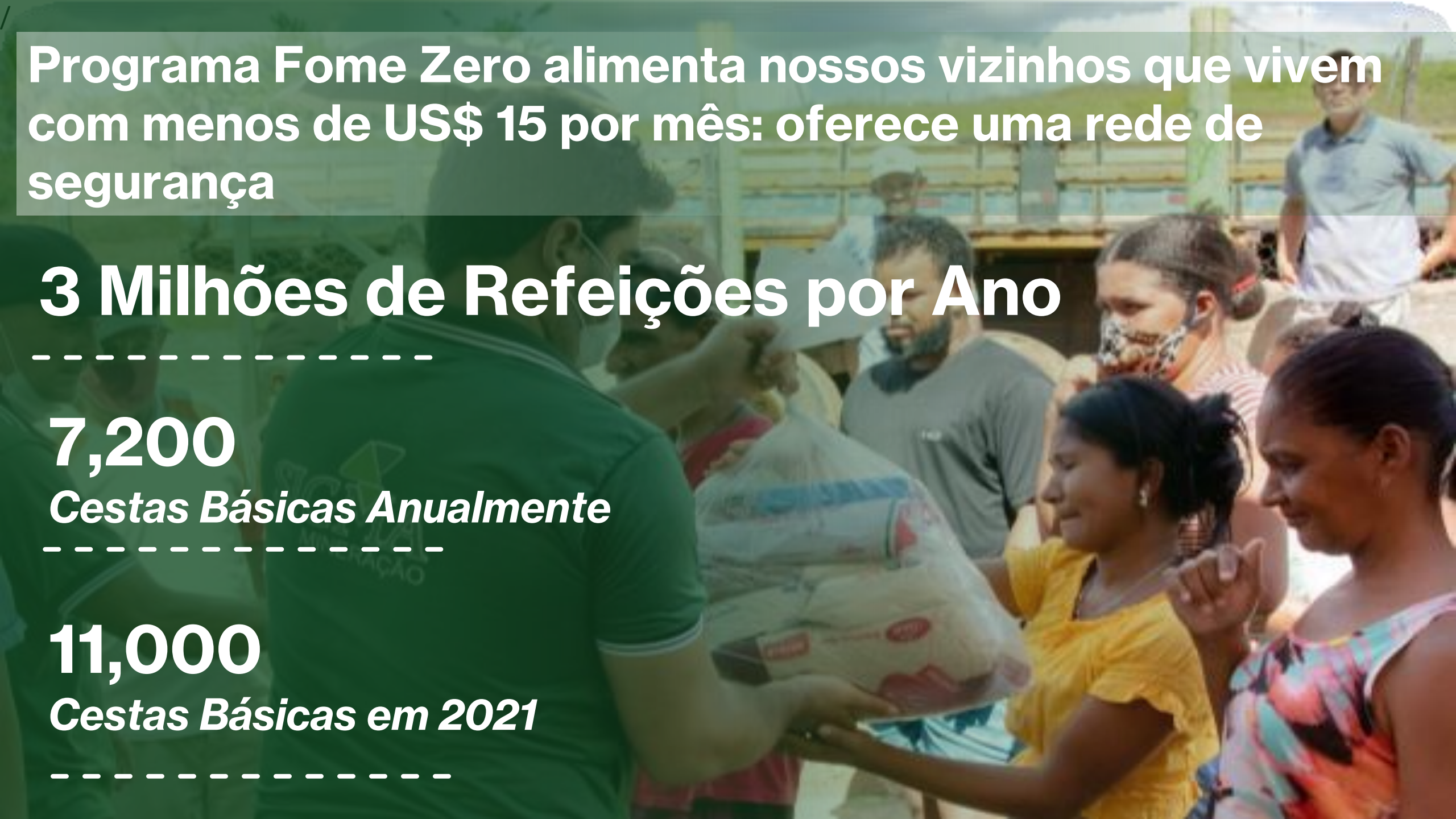
Refeições por Mes

20%

**Crescimento do PIB na
Região**

3 Milhões

**Refeições Servidas ao Ano,
Cestas Básicas**



Programa Fome Zero alimenta nossos vizinhos que vivem com menos de US\$ 15 por mês: oferece uma rede de segurança

3 Milhões de Refeições por Ano

7,200

Cestas Básicas Anualmente

11,000

Cestas Básicas em 2021

Programa de Retorno à Terra Natal: Capacitando Nossa Gente, Trazendo-os de Volta PARA CASA em Minas Gerais... para o Brasil

1,700

Direct Jobs: 95% Local out of 1,600 at Site

18,000

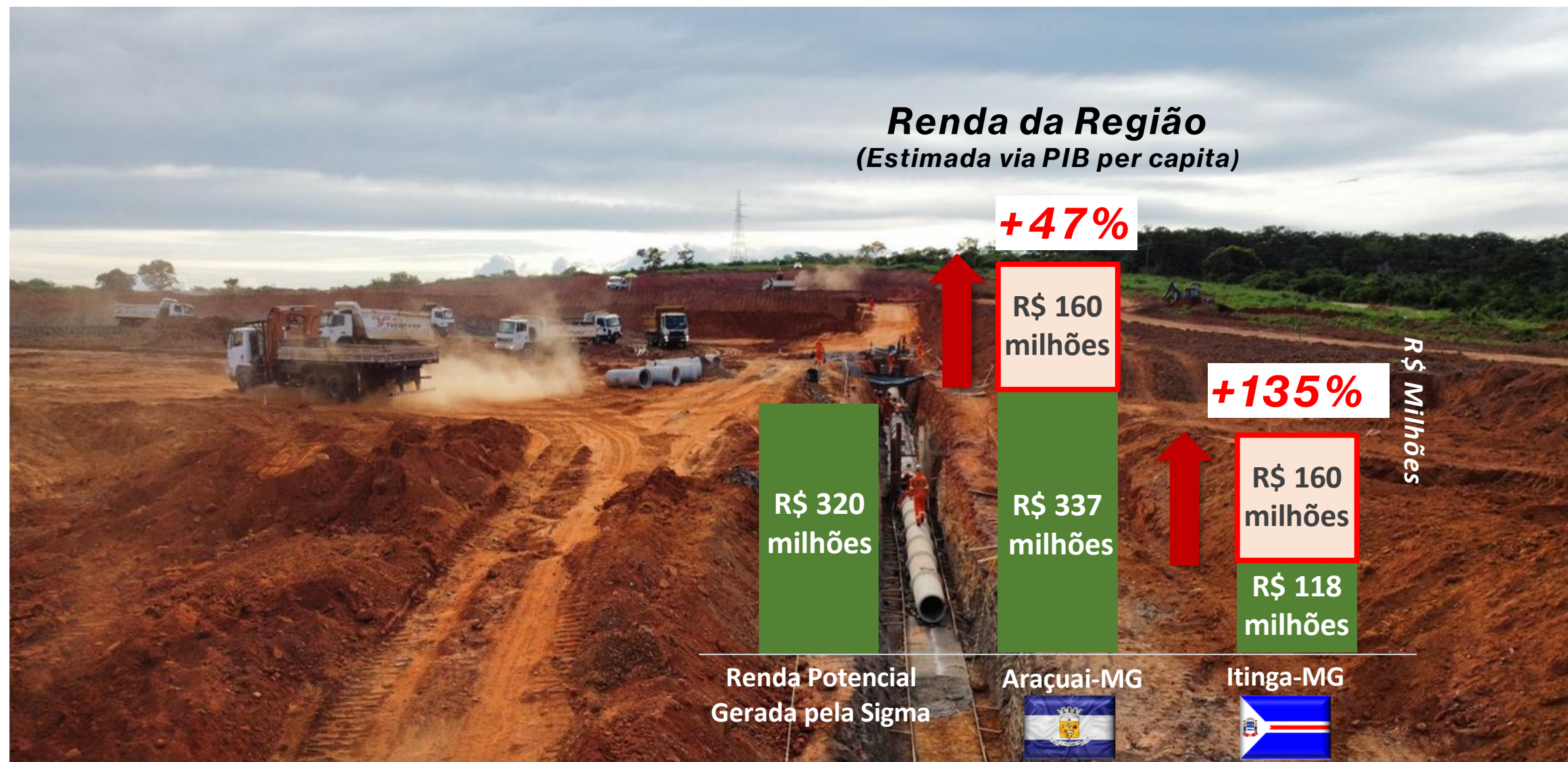
Indirect Jobs: 100% local

21,000

***Job Opportunities: Microcredit,
Smallscale Agriculture***



Sigma[®] é a maior Geração de Renda e Empregos na Região



Microcrédito: Elevando as Mulheres


2,000

Microcredit Lines Granted

+11,000

People in their Families





Programa Seca Zero: Reconstruindo o Tecido Social da Região e Mantendo o Pequeno Agricultor em Casa

1,400

Irrigation Structures for Subsistence Farmers

8,400

Job Opportunities for Families

Educação para Todos: 100% dos Nossos Vizinhos em Escolas de Tempo Integral

4

Schools and Daycare Centers

+300

Children

+1000

*Their Parents, Relatives, Grandparents Can
Work Full Time*



Programa de Reflorestamento complementa compromissos de carbono

30,000

Trees planted

20,000

Trees to be planted

700 hectares

Atlantic forestland preserved



Oportunidade Para o Brasil:

**Pequena Mudança Regulatória
Contribuiu Para Transformar
Região Mais Pobre do País**

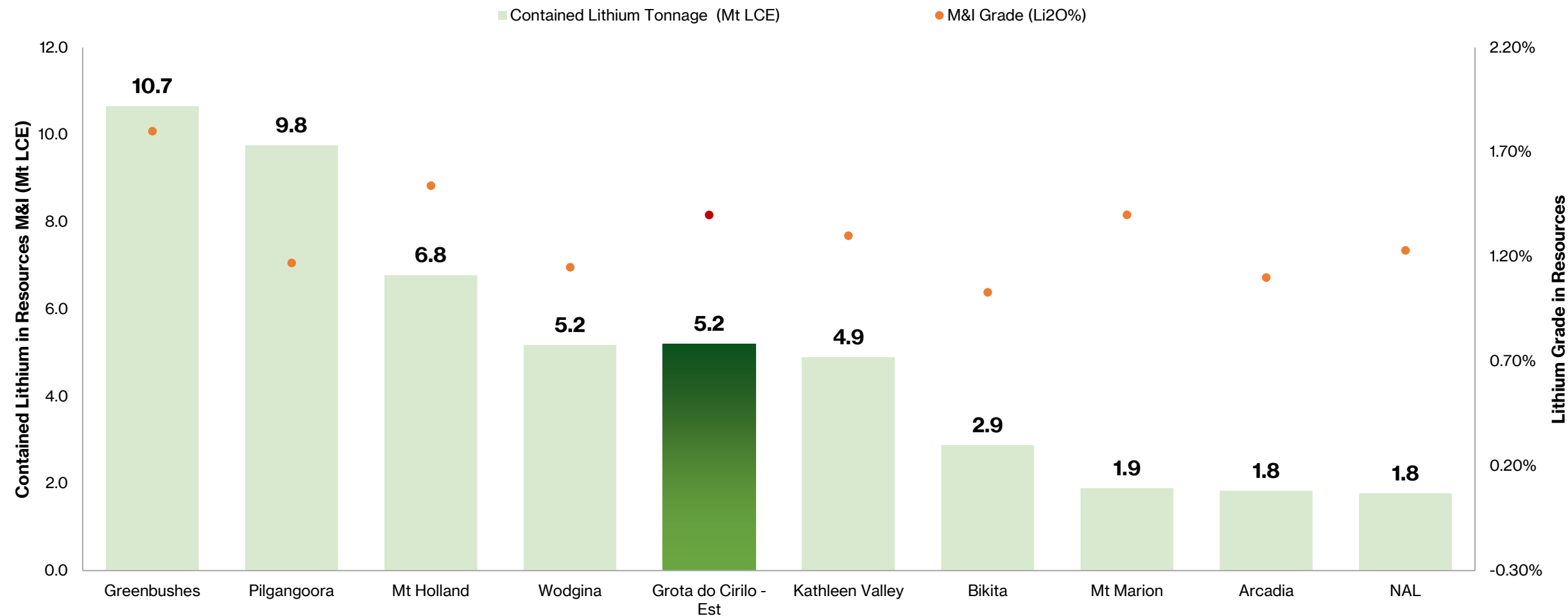


Brasil: Combinando Produção em Grande Escala, Baixo Custo e os Mais Altos Padrões Ambientais e Trabalhistas...



Grande Escala: A Sigma é o 5º maior complexo industrial de produção de lítio do mundo – 25 anos de produção com capacidade dobrada

Estimated Projected Mineral Resource Estimates @ 150Mt: Ability to Significantly Grow

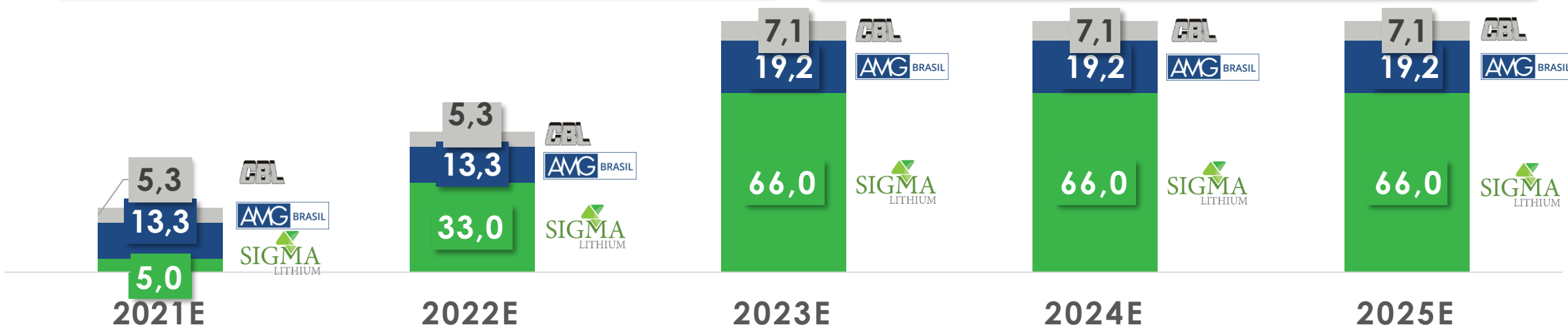


Source: Company Reports

Brasil Possui Escala Competitiva: Tornar-se Líder do Lítio Verde

Capacidade Instalada de Lítio no Brasil ('000 t LCE)

SIGMA = Maior Capacidade Instalada no Brasil



1,4 milhão de carros por ano

270g CO₂/km; 4t CO₂/carro ao ano

86 GW/h baterias para armazenar energia

Brasil já se Beneficia do Crescimento do Setor de Baterias de Lítio: mais de U\$ 20 bilhões de Investimentos Globais

Investimentos Baterias > \$20 bilhões



LG Energy Solution to invest \$4.5 billion in U.S. battery production



SK Innovation to invest \$4.3 bln in U.S. battery production with Ford Motor



Panasonic turned its \$30 million Tesla investment into a \$3.6 billion windfall



Tesla Supplier CATL To Invest Up To \$6B In Lithium-Ion Battery Projects



Investimentos Cadeia do Lítio > \$ 0.5 bi

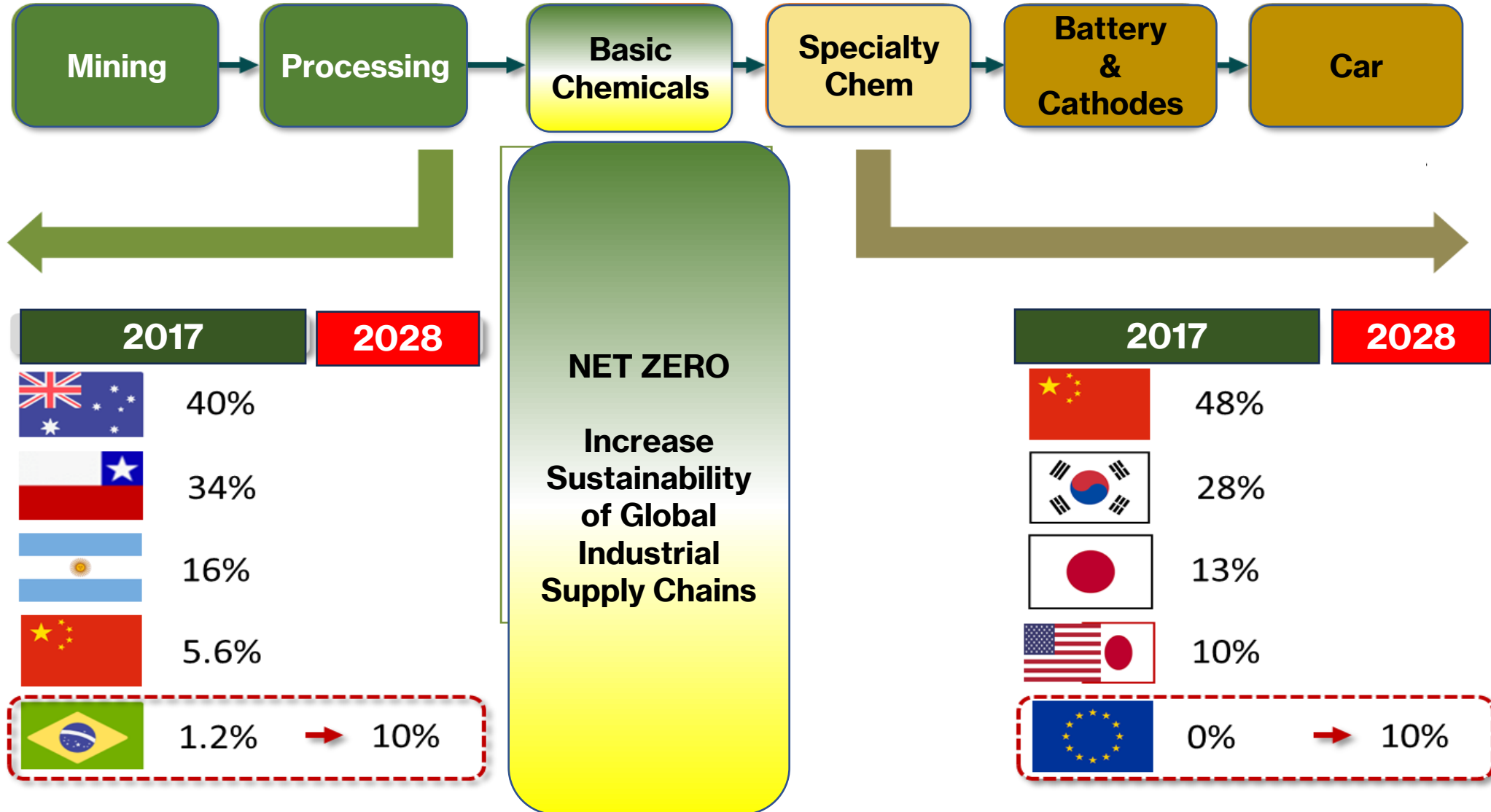


Sigma Lithium vai investir **R\$ 1,2 bi** em unidade de produção de lítio no Vale do Jequitinhonha

AMG Mineração investirá cerca de **R\$ 782 mi** em planta de hidróxido de lítio em MG

CBMM investe **R\$ 72 milhões** em startup que desenvolve materiais avançados para baterias de íons de lítio

Reorganização Global das Cadeias de Suprimento: Segmento Intermediário Industrial Migrará para Produtores de Baixo Carbono



 bnamericas

[NEWS](#) [BRAZIL](#) [BANKING](#) [MINING & METALS](#)

Sustainability approach gets Sigma Lithium US\$45mn financing

Published: 06/30/2020

S&P Global

Market Intelligence

**Sustainable lithium would be
'game over' for gas cars –
Sigma Lithium co-CEO**

FT

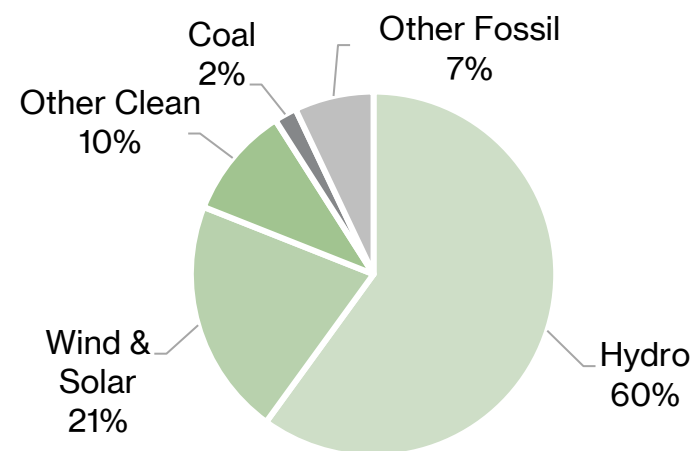
Sigma Lithium Resources aims to put
Brazil on the map

A Rede Elétrica do Brasil Viabiliza a Descarbonização

Energia limpa a preços competitivos globalmente



- In 2023 ~91% of Brazil's electricity was powered by clean energy sources.⁽¹⁾
- Sigma secures its power from the Irapé Hydroelectric Plant, 100km from site. Grid supports alternatives as needed.
- Primary electricity consumption at Greentech plant, peers often run on diesel generators
- Sigma has 5-year fixed contract for electricity at ~\$0.02 / kWh





How Clean is the Nickel & Lithium in a Battery?

The production of lithium and nickel, **two key raw materials for batteries**, can produce vastly different emissions profiles.

These crucial metals will have a significant impact on the environment depending on the deposits chosen to mine and process.



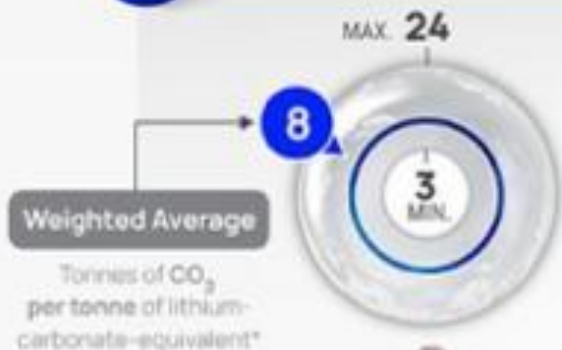
Lithium Emissions

Per Extraction Process

Lithium is sourced from solar evaporated brines or mined from hard rock ores, usually **spodumene**. Future supply will increasingly rely on hard rock ores to meet growing demand.



Mining



Source

Other Minerals
(e.g., petalite, lepidolite)

Hard rock makes up ~50% of global mined lithium supply.



Source

Spodumene

Most spodumene is mined in Australia and shipped to China for processing.

It is considered carbon-intensive due to both countries' fossil fuel reliance.



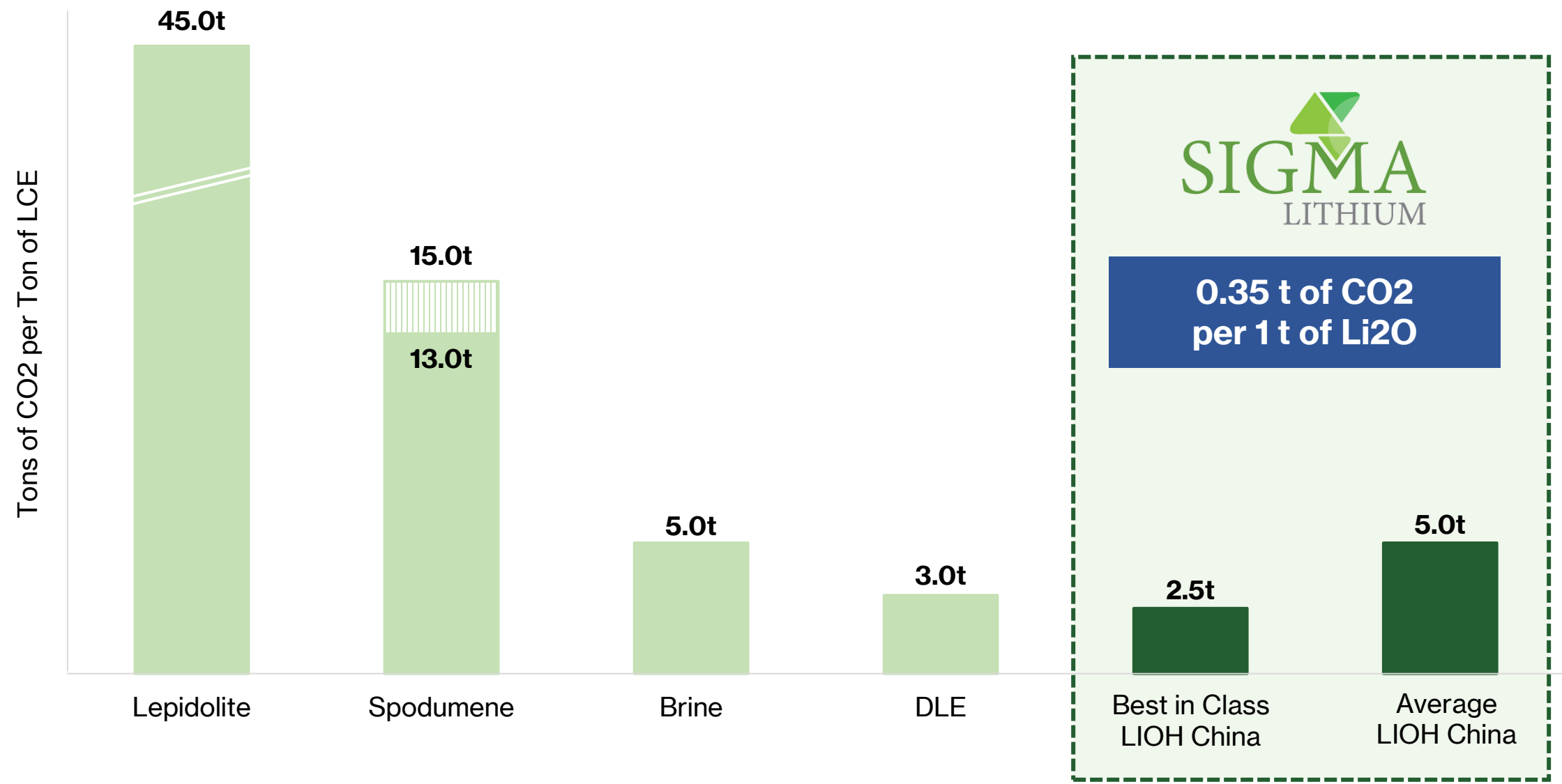
Evaporation & Extraction



Source

Brine

Sigma Lithium: Viabilizando Produtos Químicos Especiais com ZERO Emissão de Carbono



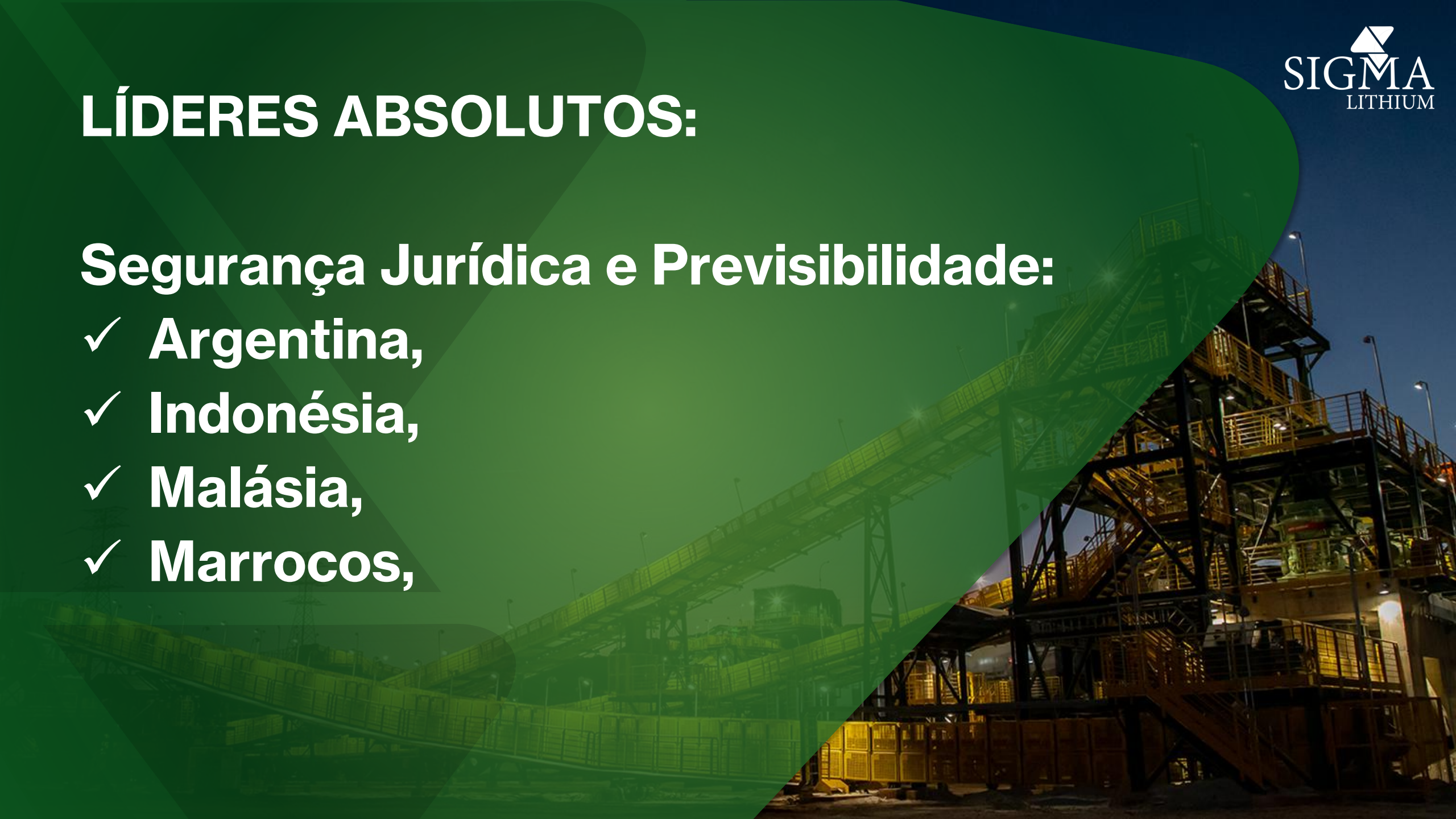
Mas Outros Países Também Avançaram Rapidamente



LÍDERES ABSOLUTOS:

Segurança Jurídica e Previsibilidade:

- ✓ Argentina,
- ✓ Indonésia,
- ✓ Malásia,
- ✓ Marrocos,



... Na Indústria de Lítio Outros Países Vizinhos Estão Na Frente do Brasil: **Perda de Bilhões em Investimentos...**

Insegurança Jurídica, Regulatória e Lentidão no Brasil



Chile launches call to boost lithium production and attract new operators

Published by [Jessica Casey](#), Editorial Assistant
Global Mining Review, Friday, 15 October 2021 11:15

Save to read list



Chile leverages its lithium with manufacturing incentives

Companies bid on projects tied to the country's vast reserves

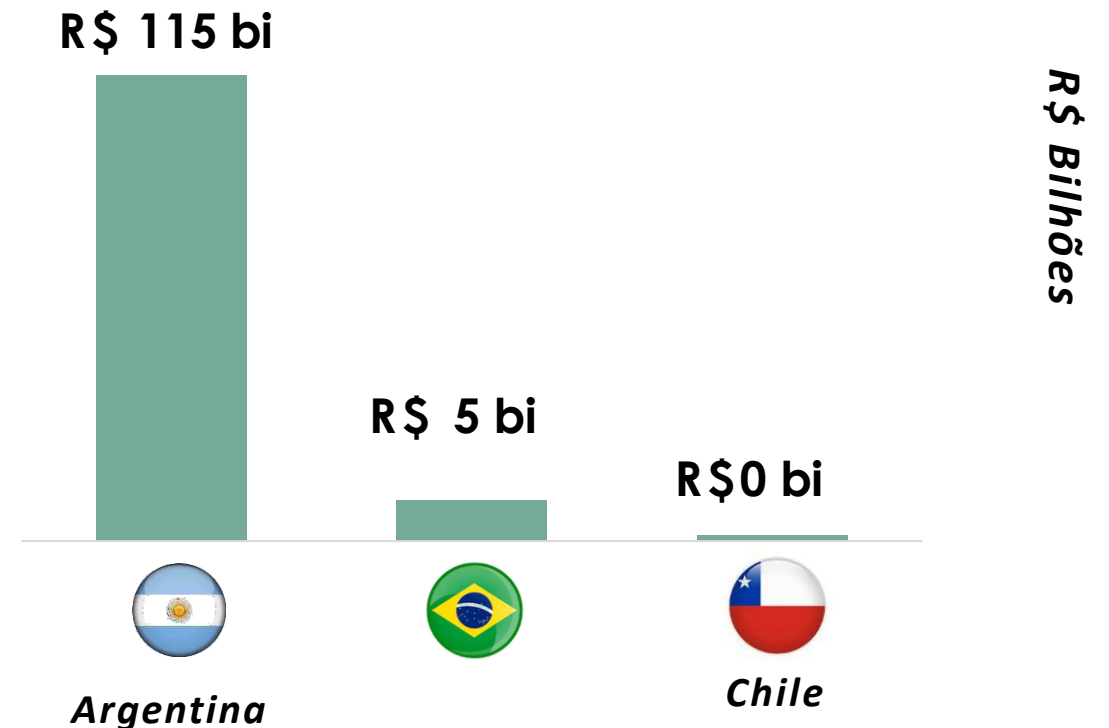


Australian Government gives A\$2bn boost to critical minerals



Argentina hints at incentives for lithium investment

Investimentos na América do Sul (2020-2025)



Liderar Globalmente ...É Possível:

- ✓ **Segurança Jurídica: Sem Mudanças em Políticas e Nacionalismo**
- ✓ **Previsibilidade Regulatória**
- ✓ **Padrões Elevados: Cronograma de Licenciamento Ambiental**



Globalmente Há Muitos Desafios.....

**Sigma É a Voz Global Contra Garimpo
Ilegal**



Baixos Custos = Corrida para o Fundo do Poço... ZERO Padrões Éticos



Lawmakers To Probe Illegal Mining As Federal Govt Loses \$9bn Yearly

Written by **James Kwen** — 10



Against Impact of Lithium Mining



Inside Climate News

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ELECTION 2024: What's at Stake for the Climate

Justice & Health

Corruption and Rights Abuses Are Flourishing in Lithium Mining Across Africa, a New Report Finds

The global clean energy transition could be a game changer for Africa, but exploitation of miners continues as many foreign mining companies ignore local opposition.

Corrida para o Fundo do Poço...

ZERO Padrões Éticos: MINÉRIO DE SANGUE

Lawmakers To Probe Illegal Mining As Federal Govt Loses \$9bn Yearly

Written by **James Kwen** — 10 months ago



South China Morning Post



Nigeria's government cracks down on illegal mining as global demand for lithium grows

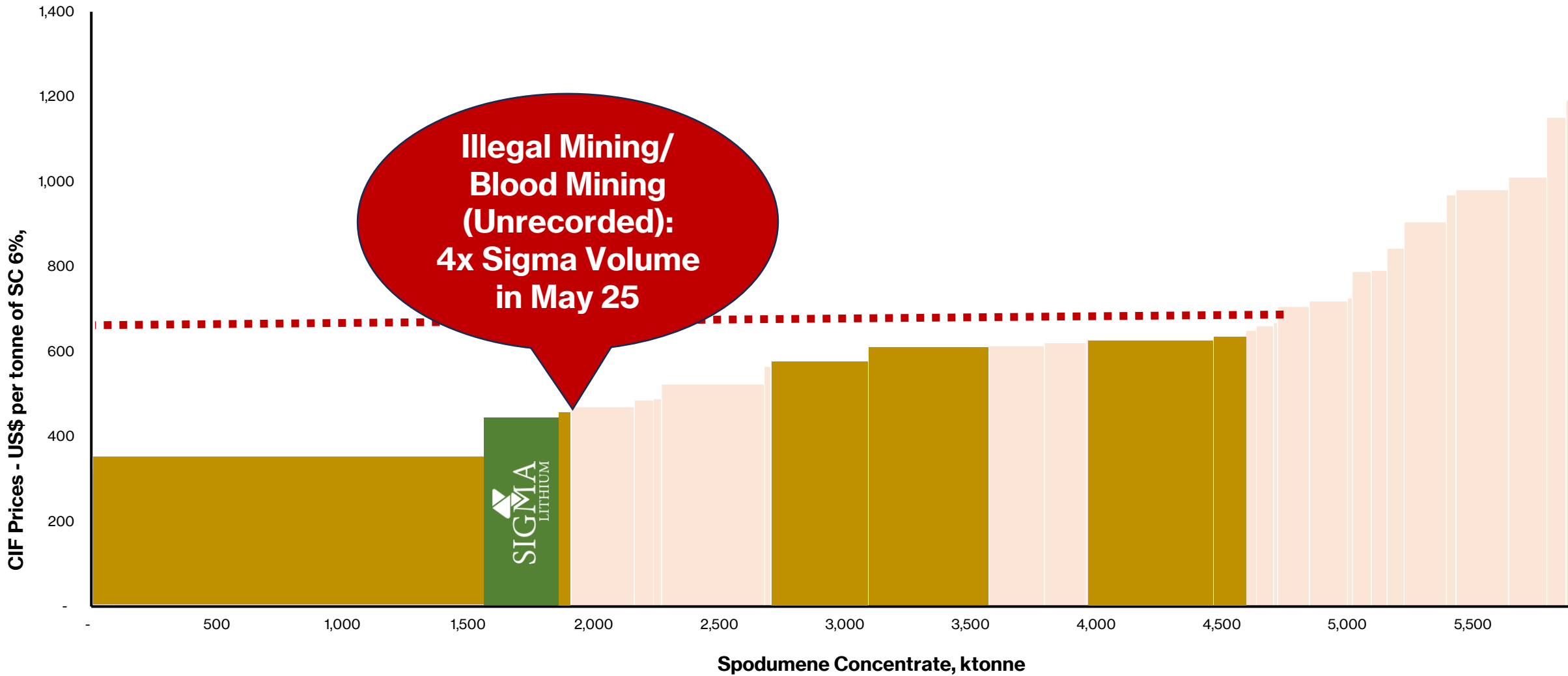
Nigeria is emerging as a new source of lithium as renewable energy and batteries fuel demand

Government has seized illegally mined lithium and made arrests as it takes action on operations



O Brasil Enfrenta o Desafio: Lucros Operacionais em Ciclos Baixos – SEM ATALHOS nos Padrões de Mineração e nos Direitos Humanos

Hard-Rock C3 cost-curve



Source: Benchmark Minerals, 4Q24 quarterly report

Excelência Operacional: Quase 2 anos sem Acidentes com Afastamento – Cultura de Segurança e Direitos Humanos



One of ICMM's Best Safety Records

- Strengthening Health, Safety & Environment Strategy
- Employee Engagement & Safety Leadership
- Workshops & Safety Culture Development

720+ Consecutive Days
Without a Lost Time Injury (LTI)

1.23
1Q25 TRFIR⁽¹⁾

(1) International Council on Mining and Metals ("ICMM") metric of total recorded cases per worked hours. Data as of March 31, 2025

Vídeo

Regiões Com Desafios:

- ✓ **Insegurança Jurídica: Zimbabwe, Congo**
- ✓ **Garimpo Ilegal: Africa (Nigéria)**
- ✓ **Licenciamento Judicializado Com Indígenas: America do Norte**
- ✓ **Custos de Produção Elevados: Australia, Canada, EU**



Concorrencia Global Muito Pesada....

Como no Agro....

Geração de Desinformação....

**Diminui a Competitividade
do Brasil...**

Assusta Investidores



Unico Litio ZERO do Mundo

Produzido na Industria VERDE no Brasil

ZERO Barragens

ZERO Carbono

ZERO Quimicos

ZERO Agua Potavel

ZERO Rejeitos

e....

**100% Prosperidade
para o Vale do Jequitinhonha**



Processo Industrial da Sigma Lithium: Emissão Líquida Zero, Zero Rejeitos, Zero Produtos Químicos Perigosos



Green Mining



Greentech Industrial Plant
Lithium Processing



80x



Greentech 3.0 = Automação Industrial + Algoritmos de Software

Implementing AI in the SCADA system :

- Detection of Anomalies
- Correction Recommendations
- Self Learning Metallurgy from Mineralogy



Planta Greentech



Planta Greentech

