

ENERGY DELUSIONS

A Critique of IEA's Global Critical Minerals Outlook 2025

October 21, 2025 | 10:30 a.m. – 12:00 p.m. ET



NATIONAL CENTER
FOR ENERGY ANALYTICS

PROGRAM AGENDA



- 10:30 a.m. Welcome**
Portia Roberts, NCEA Policy Director
- 10:35 a.m. Congressional Perspective**
Senator Mike Lee (R-UT),
Chairman of the Energy & Natural Resources Committee
- 10:55 a.m. Industry Perspective**
Brandon Craig, President of BHP Americas
- 11:15 a.m. Break**
- 11:25 a.m. Report Findings from NCEA's
Energy Delusions: Critical
Minerals Forecasts**
Peter Bryant, NCEA Advisory Board Member &
Chairman of Clareo and Key Minerals Forum;
Satish Rao, Managing Director of Clareo
- 11:45 a.m. Closing Remarks and Q&A**
Portia Roberts, NCEA Policy Director
- 12:00 p.m. Program Concludes**

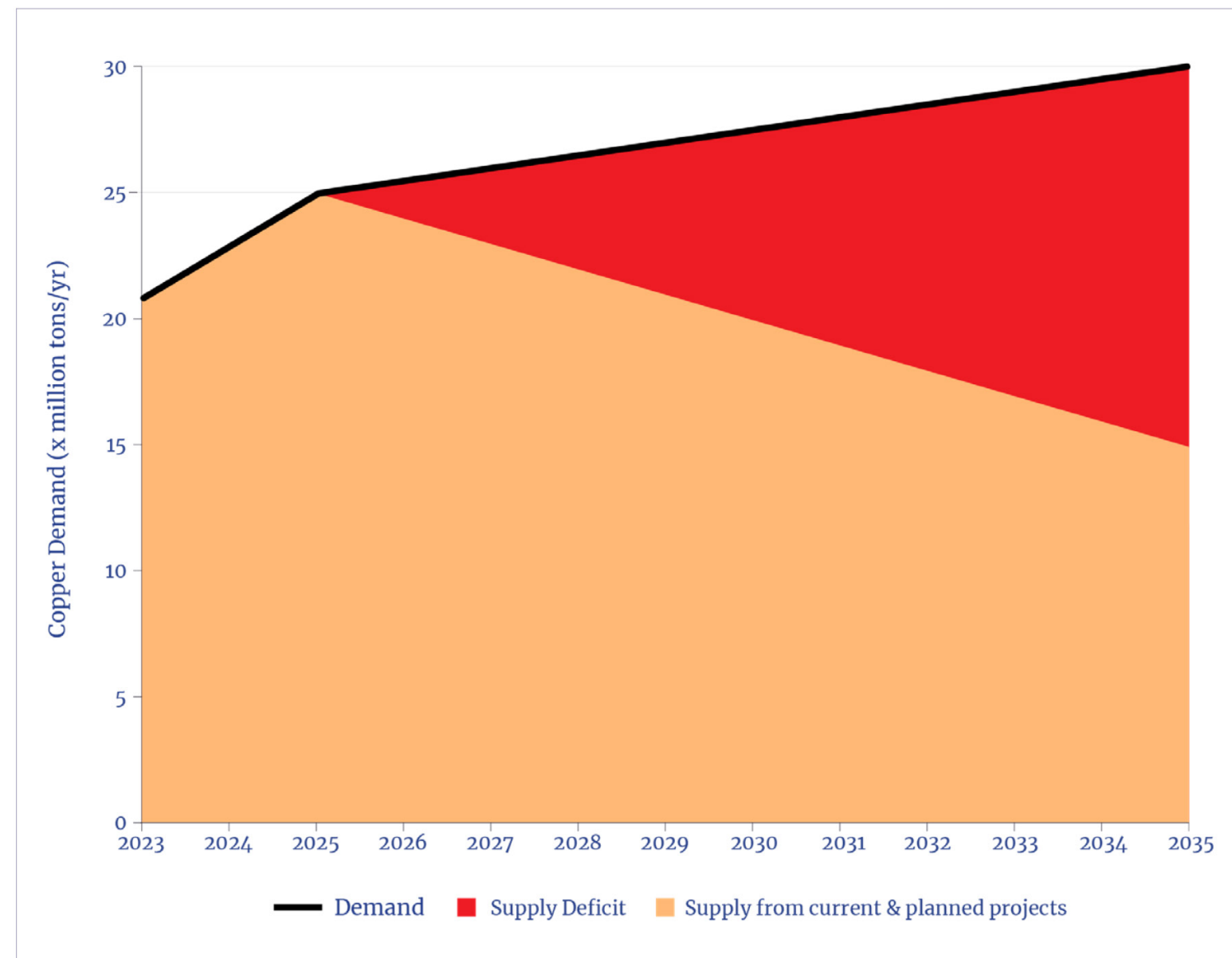
Flawed Assumptions in the IEA's Global Critical Minerals Outlook

- Neglects to sufficiently identify and analyze the market-shaping activities by countries such as China
- Does not adequately address the mining industry's struggle to secure and maintain a “social license to operate”
- Neglects to adequately account for ore grade decline and the lack of innovation in critical areas
- Does not fully explore the implications of projected minerals deficits



Copper Supply Deficit by 2035

Copper Supply Deficit by 2035



Source: International Energy Agency (IEA), *Global Critical Minerals Outlook 2025*, May 21, 2025, 190

Recent Supply Shocks

State-Directed Market-Shaping (Nickel)

Panama to shut one of world's largest copper mines after court ruling

© November 29, 2023

2 minutes read

THE WALL STREET JOURNAL

Copper Surges as Freeport Mine Accident Clouds Global Supply Outlook

REUTERS

Hudbay Minerals temporarily shuts down Peru mill amid unrest

BHP to place Nickel West on care and maintenance until at least 2027 after downturn in industry

Adrian Rauso

THE NIGHTLY
3 MIN READ • 11 JUL 2024 • UPDATED 11 JUL 2024

0 COMMENTS SAVE

Indonesian onslaught wipes out Australia's nickel industry

Kristie Batten | July 14, 2024 | 8:59 am [Battery Metals](#) [Intelligence](#) [Top Companies](#) [Australia](#) [Nickel](#)

Australian tycoon Forrest shuts nickel mines after prices crash

[Bloomberg News](#) | January 21, 2024 | 3:22 pm [Battery Metals](#) [Australia](#) [Nickel](#)

Glencore to halt New Caledonia nickel plant and sell stake

By Reuters

February 12, 2024 5:22 AM CST • Updated February 12, 2024

Avebury Nickel Mine to transition to care and maintenance

by Sarah MacNamara — February 8, 2024 in [Commodities](#), [Company news](#), [News](#), [Nickel](#), [Spotlight](#) Reading Time: 2 mins read

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The Indigenous Reframe

The Indigenous
“Reframe” from
consultation to
participation, to
achieve prosperity
and equity



"This process has cost us tears, sweat and blood."

Yaku Pérez

Ecuadorian Indigenous leader and former presidential candidate

Reuters Sep 18, 2025, 'Tens of thousands protest DPM's Ecuador mine project near key water reserve'



"For us, there's no conversation. For us, it's just imposed."

Yermin Basques

Head of the indigenous Toconao community, Chile
Reuters Jan 10, 2024, 'Protest at Chile's lithium salt flats snarls roads to SQM, Albemarle'



Supply Chain Security: Market Shaping Activity

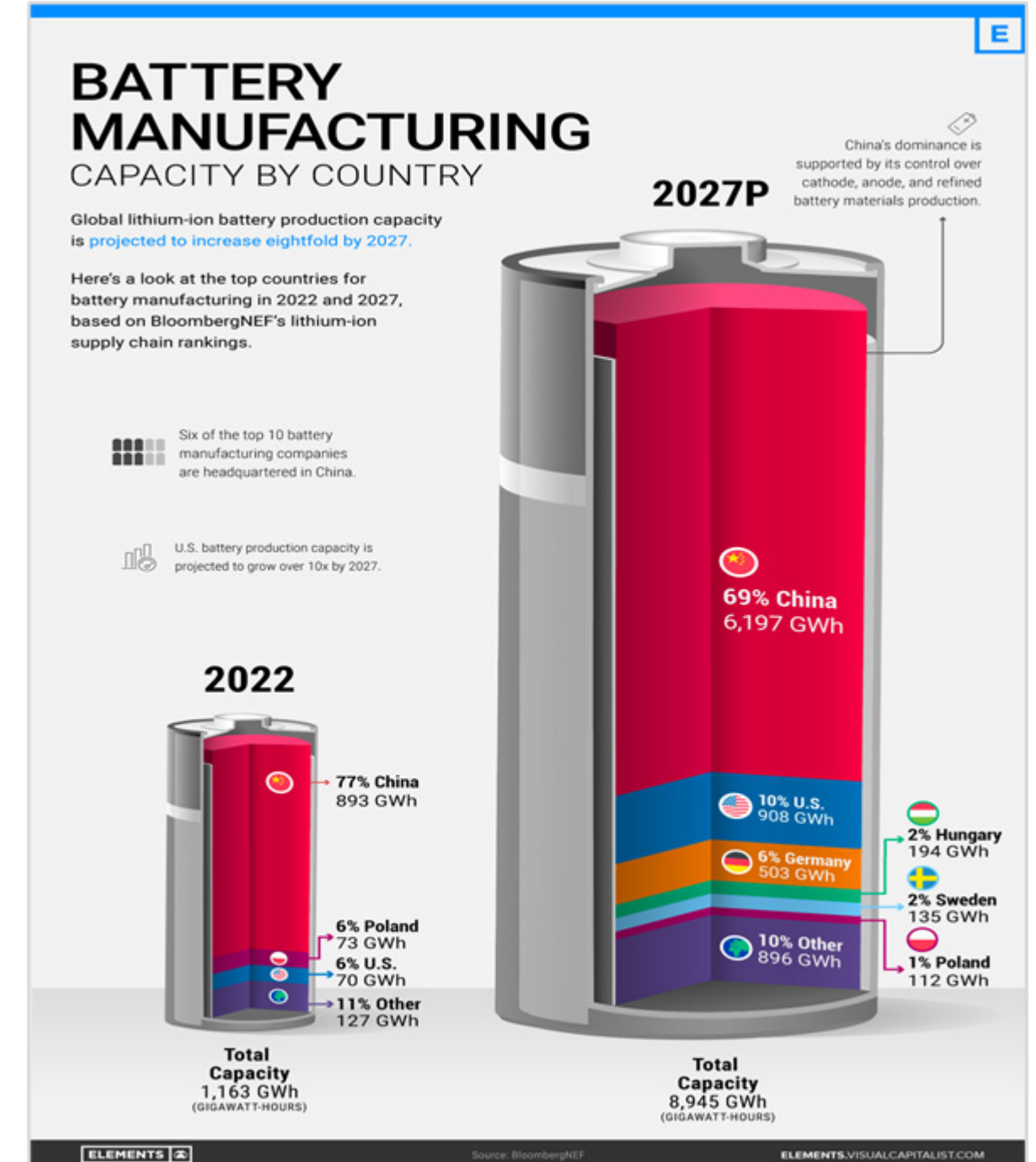
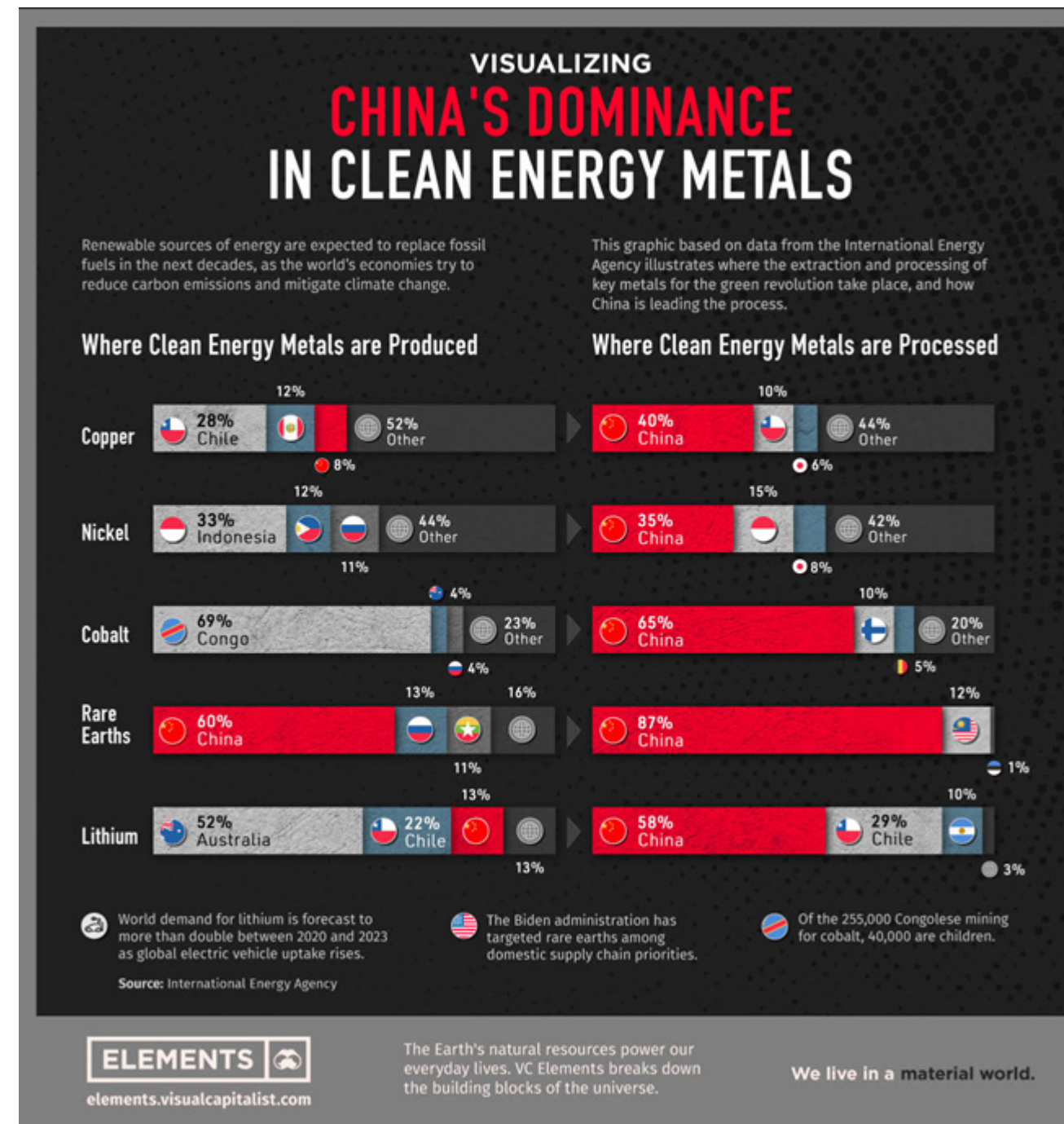
China's Market-Shaping Playbook

Invest & Control Commodities in Other Countries

Export Controls – Sorry, you can't have any!

End-to-End Value Chain Domination

Crash the Price via Over Supply



Vertical Integration * Alliances * Financial Power

China shapes and sets the rules of critical mineral markets

The Technical Supply Challenges

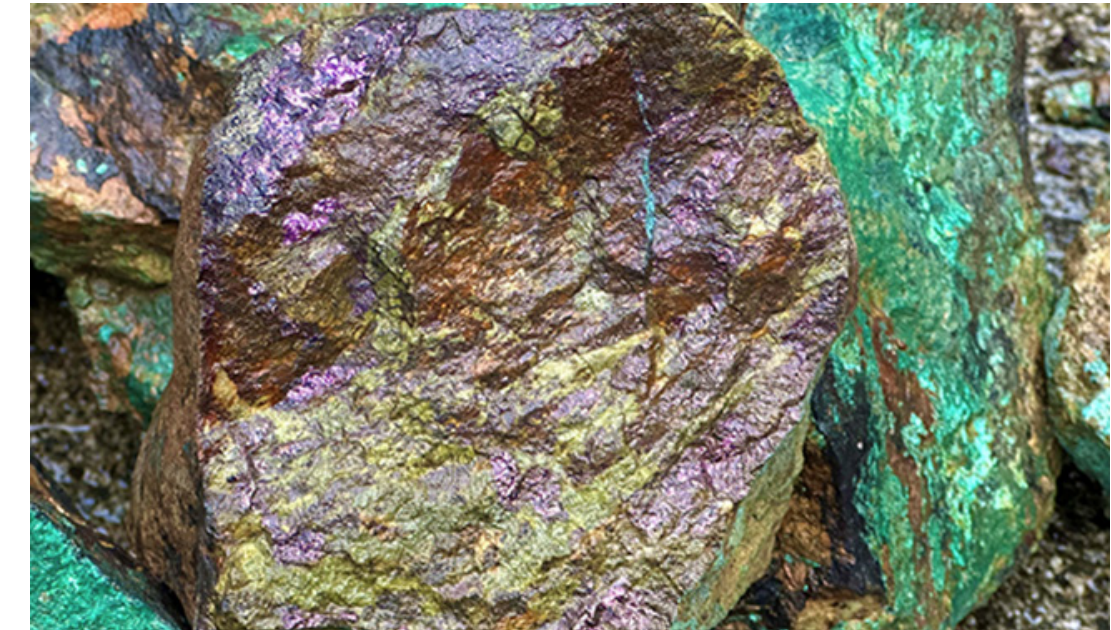
Resource intensity since 1980

16x Rock Extracted to Reach 1LB of Copper	16x Energy Required	2x Water Required
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Ore grades are declining,
becoming dirtier and difficult to
process

Critical minerals in byproducts are techno
economically challenging to extract, so they
end up in waste!

No real innovation in tailings



So What? Implications and Risks

Risks

Supply Shortages
and Shocks

Spiking Input
Costs

Energy
Expansion
Falling Short

AI Momentum
Slows Down

Implications

Unclear
Investment
Strategy

Lost AI
Leadership

Unfavorable
Public Policy

Key Actions for Congress and the Trump Administration

- Create an integrated minerals policy model
- Establish an inter-agency framework to advise on triggers for intervention
- Establish a coordinating mechanism for critical minerals
- Create a mining innovation initiative





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