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

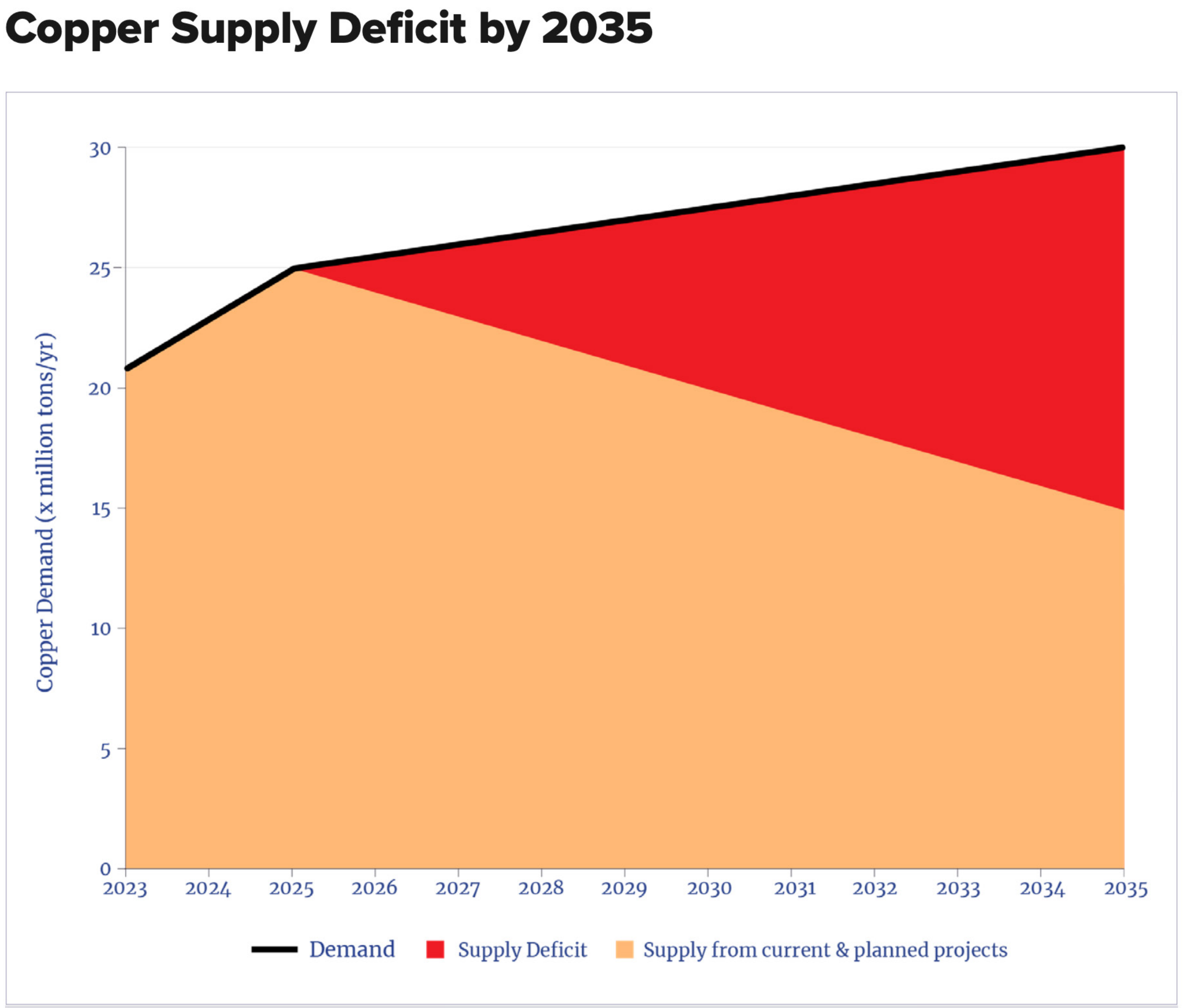
PROGRAM AGENDA

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

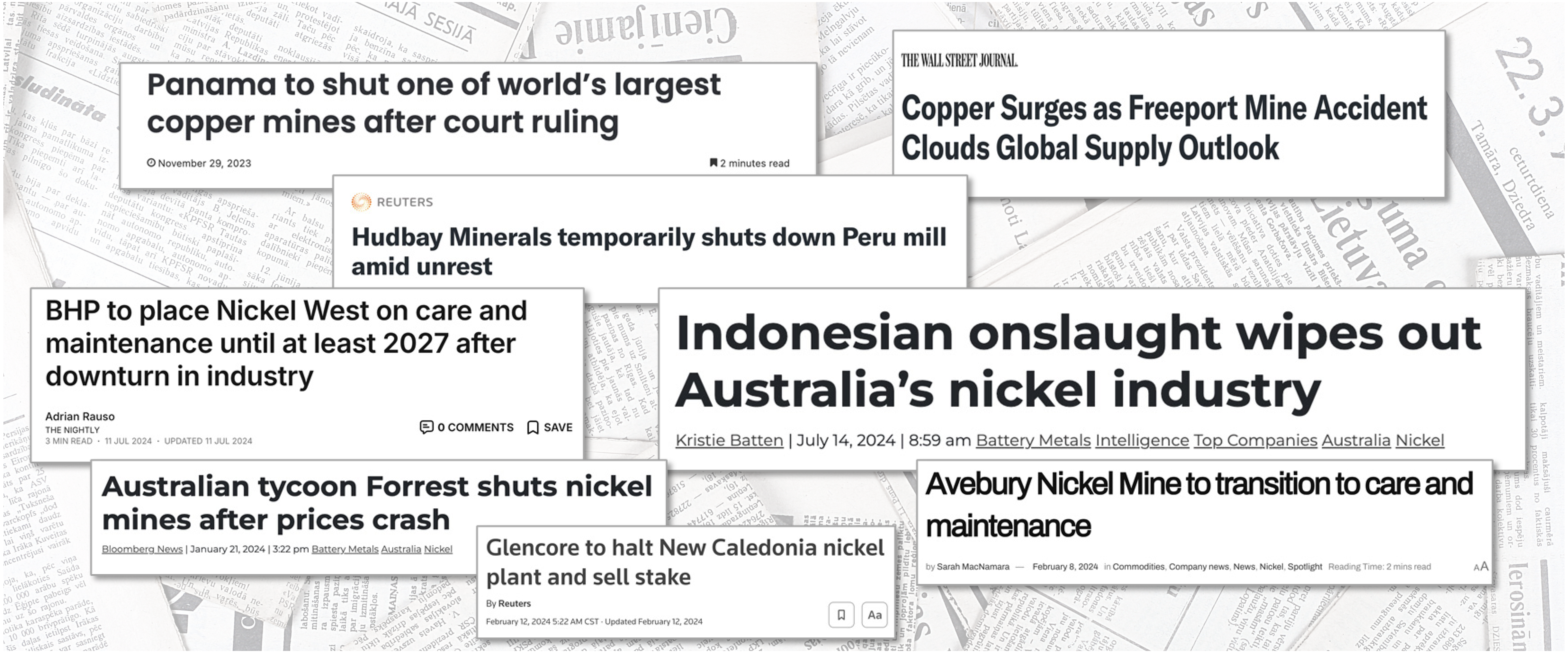
Copper Supply Deficit by 2035



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

Recent Supply Shocks

State-Directed Market-Shaping (Nickel)



The Indigenous Reframe

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

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

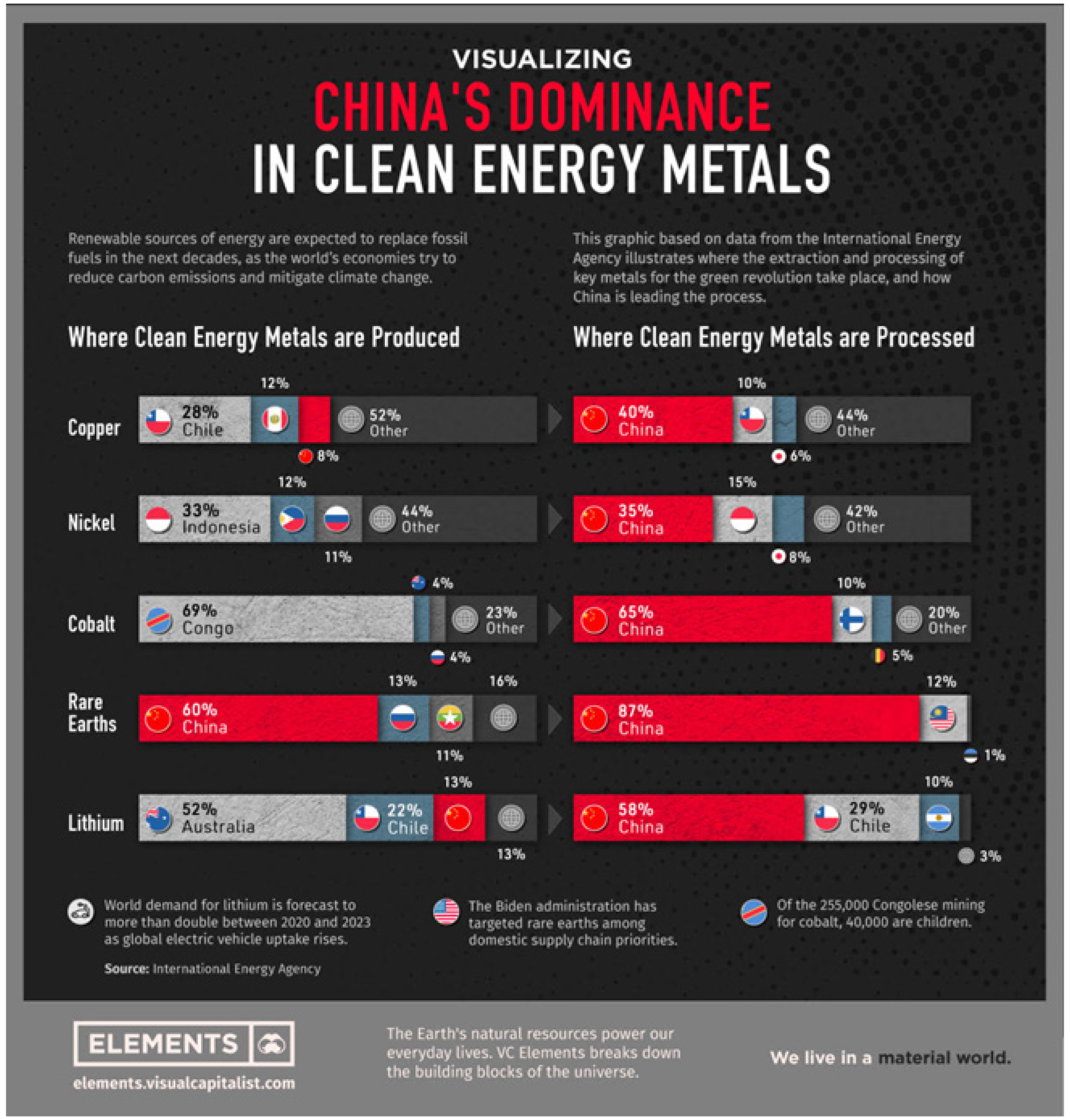
Yaku Pérez
Ecuadorian Indigenous leader and former presidential candidate
Reuters Sep 18, 2025, ‘Tens of thousands protest DPM's Ecuador mine project near key water reserve’

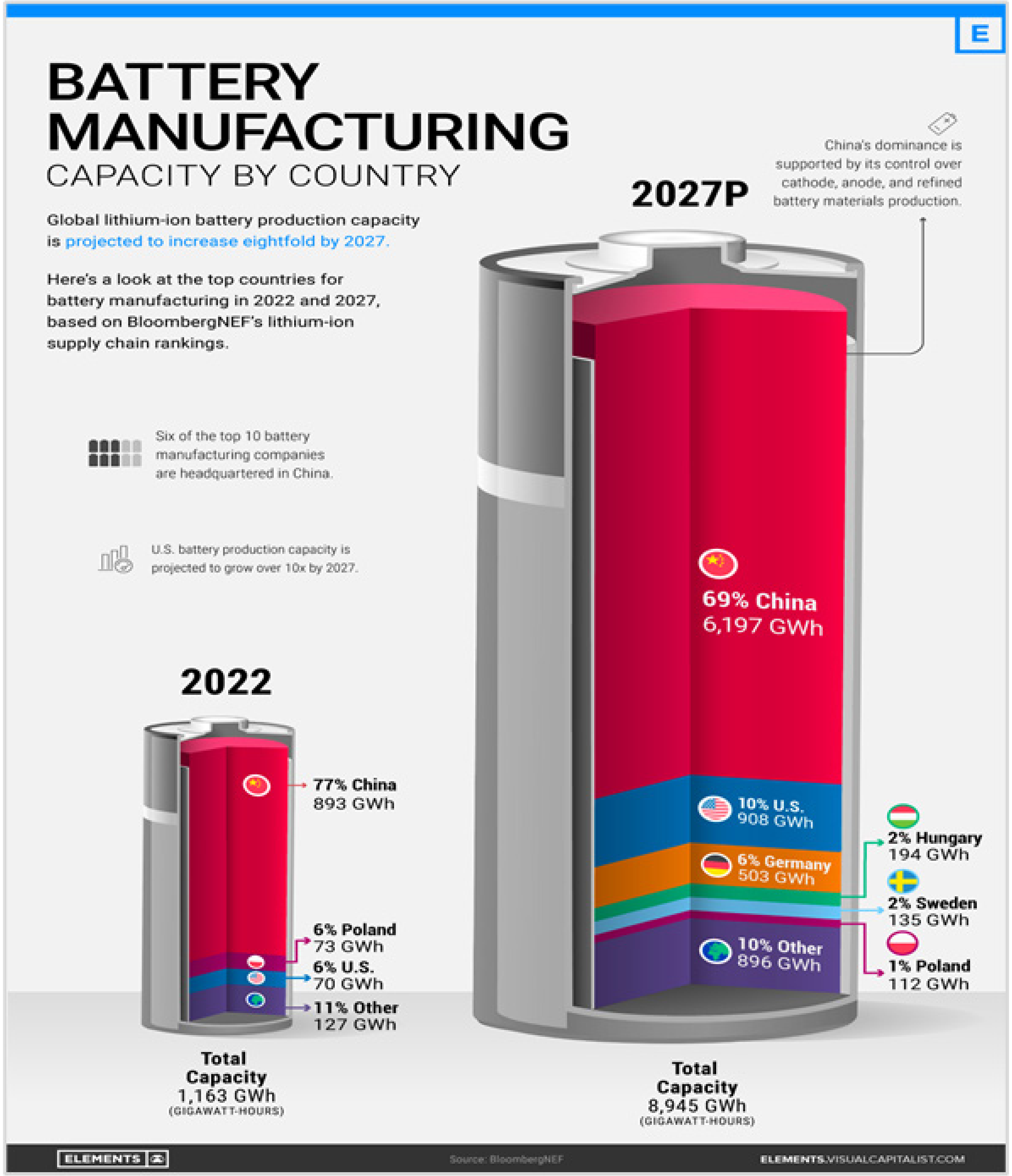
"For us, there's no conversation. For us, it's just imposed."

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

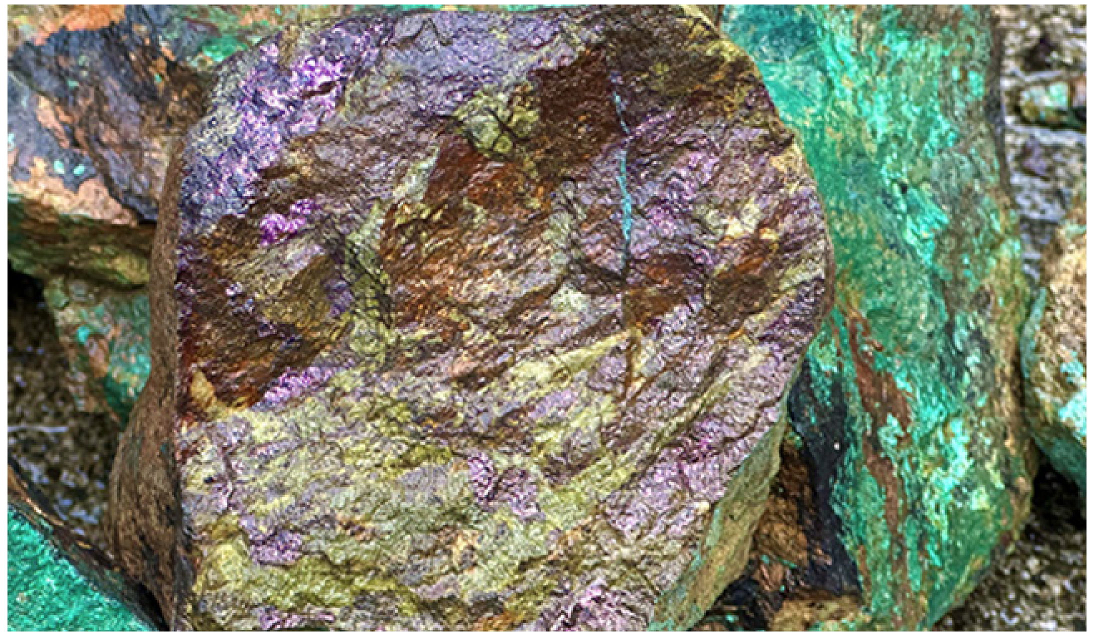
Resource intensity since 1980

16x Rock Extracted to Reach 1LB of Copper	16x Energy Required	2x Water Required

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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