

# HOW TO WIN THE GLOBAL MINERALS RACE

Global events have sent the price of mineral commodities soaring. This combined with the growing demand for minerals is exacerbating stressed supply chains and limited production capacity. The International Energy Agency predicts the energy sector's demand for minerals could grow **6X** by 2040.<sup>1</sup>

The U.S. has stood by idle while China and other countries have emerged as dominant producers of minerals needed for EV batteries, technology and infrastructure.

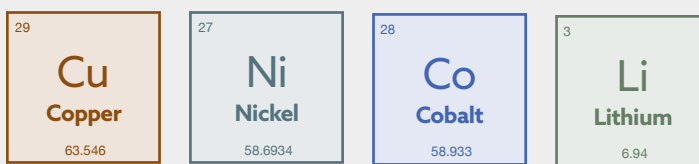


## THE UNITED STATES IS BEHOLDEN TO CHINA FOR MINERALS



**16** The U.S. relies on China for 16 critical minerals.<sup>2</sup>

China is the largest processor of **copper, nickel, cobalt, lithium** and **rare earth elements**, controlling **75%** of lithium-ion battery production, **60%** of cathode production and **80%** of anode production.<sup>3</sup>

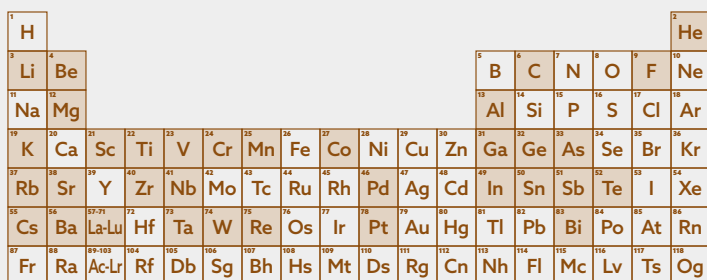


Only **9** of the world's **142** lithium-ion battery mega factories are planned for the U.S. while **107** are in China. That's equivalent to China building one factory a week while the U.S. builds one every four months.<sup>4</sup>



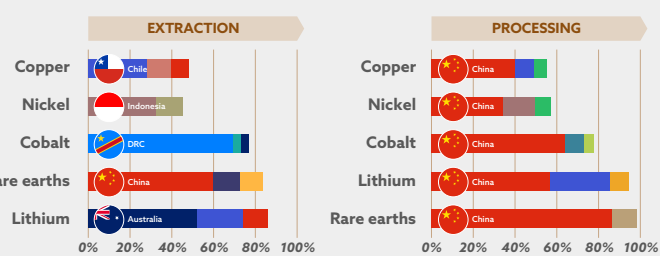
## 20 YEARS OF IMPORT DEPENDENCE

In 2021, the U.S. imported more than **50%** of **47** mineral commodities; **15** were critical minerals. Of those **47**, the U.S. imported **100%** of **17** minerals; **14** were critical minerals.<sup>2</sup>

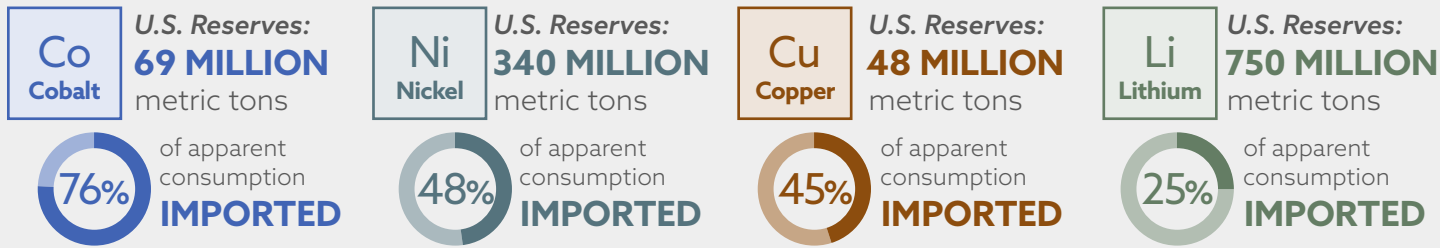


The U.S. is home to an estimated **\$6.2 trillion** in minerals, but we had net imports of **\$90 billion** worth of minerals in 2021 alone.<sup>2</sup>

### SHARE OF TOP THREE COUNTRIES EXTRACTING/PROCESSING CRITICAL MINERALS<sup>5</sup>



## CONTINUED IMPORTS DESPITE AN AMPLE SUPPLY<sup>6</sup>



### STALLED SUPPLY



**Twin Metals**, 30 million pounds of cobalt available in mine plan, permitting process currently stalled<sup>7</sup>



**PolyMet**, 170 million pounds of nickel available in mine plan, in permitting process since 2005<sup>8</sup>



**Resolution Copper**, potential to produce 25% of U.S. copper consumption, in permitting since 2013<sup>9</sup>

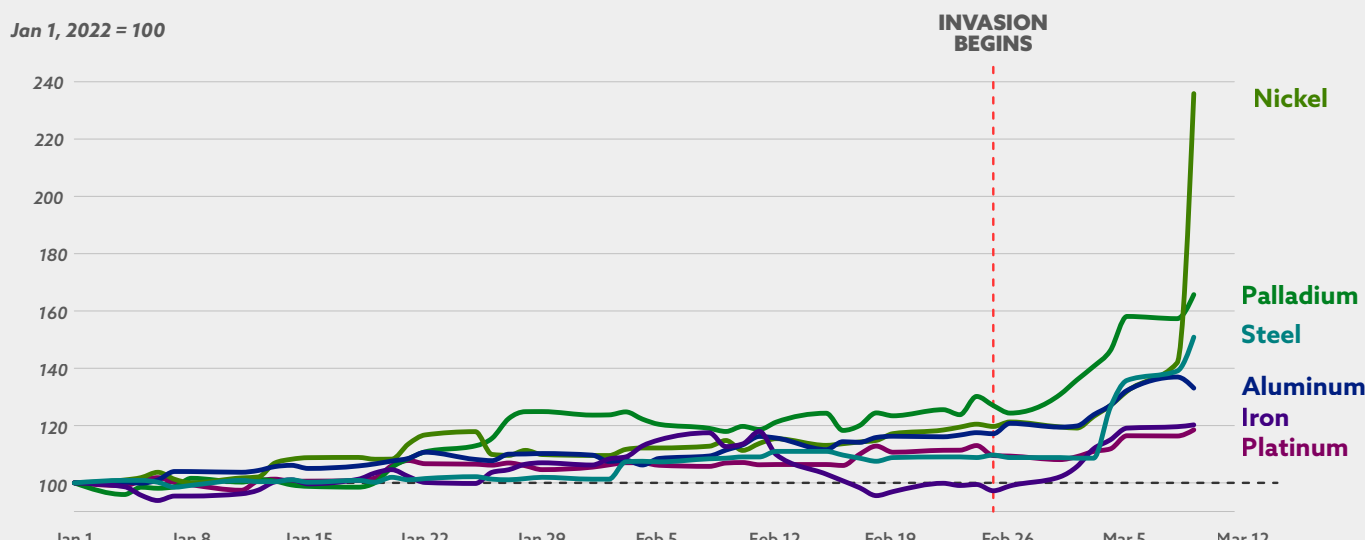


**Lithium Americas Thacker Pass**, largest known lithium deposit in the U.S., in development more than a decade<sup>10</sup>

## A GROWING MINERALS SUPPLY SHORTAGE

The International Energy Agency warned of the risk of supply shortages that would lead to price hikes for raw materials and slow the energy transition.

### A LOOK AT COMMODITY PRICES AFTER RUSSIA'S ATTACK ON UKRAINE<sup>11</sup>



## U.S. MINERALS MINING ON THE BRINK



Average time to permit a new mine in the U.S. is **7-10 years**.



It takes **5X longer** to get approval to mine our own mineral resources than it does for countries with similar environmental standards.



**7-10 years**



**2-3 years**

**7-10 years** to secure a mine permit in the U.S. vs. **2-3 years** in Canada and Australia.

## THREE STRATEGIC STEPS FOR SUPPLY CHAIN RESILIENCY

The United States must enact a **comprehensive minerals strategy** to meet soaring mineral demands and secure our unstable minerals supply chains.

### 1 IMPLEMENT COMMONSENSE PERMITTING REFORMS



- Improve the permitting process in the U.S.
- Increase coordination and reduce duplication between federal and state agencies.
  - Adhere to schedules for permit reviews, transparently tracking progress to provide accountability.



Do no harm.

- New regulatory requirements or environmental reviews are unnecessary. U.S. minerals mines are already subject to over three dozen federal and state laws and regulations.
- Additional financial burdens through new royalties or taxes may make many U.S. mines financially unworkable. Many mines already pay between 40-50% of earnings in federal, state and local taxes.

### 2 INCREASE DOMESTIC PRODUCTION AND PROCESSING



U.S. is home to an estimated \$6.2 trillion of mineral reserves that will help ensure the success of future energy technologies and security of our economic prosperity.

Utilize the Defense Production Act to help secure the minerals and materials necessary for battery minerals and our national security.



Prioritize both mineral production and processing within the United States.

Ensure timely and appropriate access to mineral-rich federal lands.

### 3 PURSUE AN ALL THE ABOVE APPROACH



Collaborate with allies to grow capacity throughout new minerals supply chains.

- Leverage the USMCA and strong mining industries within North America.

Seek long-term, fixed price contracts to guarantee supply with federal procurement requirements.



Invest in new technologies and human capital through grant programs to boost efficiency.

Encourage minerals recycling efforts across every sector of the economy.

Become an innovation hub to develop smart mining practices that are cleaner, faster and cheaper.

Find out more about the benefits of domestic minerals mining at **MineralsMakeLife.org**.

#### Sources

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