## Geopolitical Dependencies in Mineral Supply Chains: Analyzing the USA's Sourcing of Strategic Minerals

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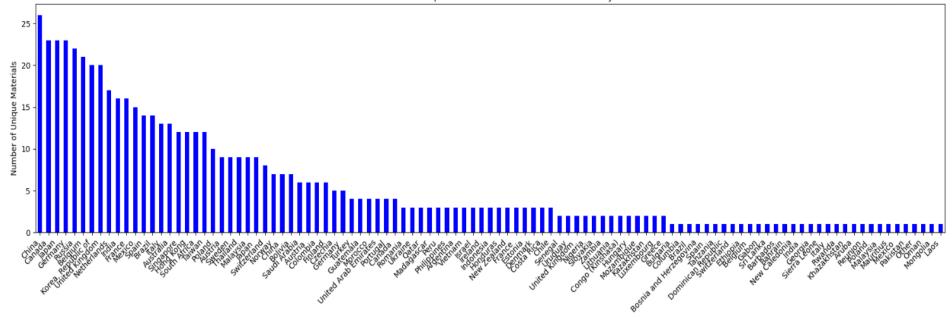


Figure 1: Number of Unique Materials Sourced from Each Country

The list of countries from which strategic minerals are sourced by the USA is shown in Figure 1 above. There's a distinct trend where the number of minerals sourced declines progressively from left to right in Figure 1, showing that a small number of countries supply a large variety of strategic minerals while many others supply significantly fewer. At the left end of the chart, countries like China, Canada, Brazil, Japan, Germany, and South Korea emerge as major suppliers, each providing a substantial number of unique strategic minerals to the USA. However, a long tail in the distribution is evident as you move towards the middle and right of the chart, where many countries supply fewer types of strategic minerals. This implies that while the U.S. has diversified its sourcing, a small group of countries continues to dominate the supply of unique minerals.

## Shortfall Impact: Percentage of Materials Dependent By Country Category

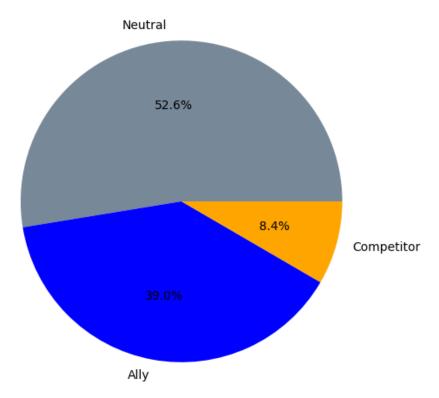
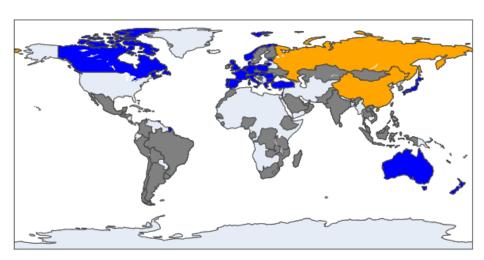


Figure 2: This pie chart appears to represent the percentage of materials dependent on countries classified as Allies, Competitors, and Neutral

A. **Ally**: Countries with a long-standing positive diplomatic relationship with the USA, often members of NATO or strong trade partners. These countries include Australia, Belgium, Canada, France, Germany, Japan, South Korea, United Kingdom. This is the second largest percentage of countries that supply strategic minerals to the USA, they comprise about 40.5% as shown in Figure 2 above.

- B. **Competitor**: Countries with significant geopolitical tension or competition with the USA. These include China, Russia, Iran, and North Korea. They are in the smallest percentage. They are about 8.4% as shown in figure 2.
- C. **Neutral**: Countries with more neutral diplomatic relations, neither strong allies nor competitors. These include other countries not mentioned in (A) and (B) above. They are the largest percentage of countries that supply strategic minerals to the USA. It is about 51.1% of the total countries.

## Global Map of U.S. Strategic Mineral Sourcing



Neutral
Ally
Competitor

Classification

Figure 3: Classification of countries based on their geopolitical relationship with the USA in sourcing strategic minerals.

In North America, Canada is depicted in blue, indicating its status as an ally of the USA. In Europe, Western European countries such as the UK, France, and Germany are also marked in blue, highlighting them as allies, while Russia is marked in orange, classifying it as a competitor. In the Asia-Pacific region, countries like Japan and Australia are shown in blue, signifying them as allies, whereas China and Russia appear in orange, identifying them as competitors. The Middle East and Africa exhibit a mix of neutral and allied countries. In South America, most countries are classified as neutral.

## **Reference:**

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