

POLICY BACKGROUND

The U.S. Geological Survey (USGS) established the Critical Mineral List in 2018 to identify minerals essential to U.S. economic and national security that are vulnerable to supply chain disruption. Phosphate and Potash are essential for plant growth and are unique because they are mined. The European Union already recognized Phosphate as a critical mineral, with Canada extending this classification to both Phosphate and Potash. Potash was recently recognized under President Trump's Executive Order (EO), "Immediate Measures to Increase American Mineral Production," setting an excellent example for USGS. Following this lead, it is crucial for the USGS to officially designate both Phosphate and Potash as critical minerals. Such recognition would ensure these essential resources receive the enduring protection and acknowledgement they deserve.

The USGS applies three key criteria to determine whether a mineral qualifies as critical:

Economic and National Security Importance – The mineral must be essential to the economic and national security of the United States.

Essential Manufacturing Function – It must serve a fundamental role in manufacturing vital products.

Supply Chain Vulnerability – The supply chain must be at risk of disruption.

PHOSPHATE AND POTASH SUPPLY SHOCKS

Several factors contribute to the vulnerability of the supply chains, making Phosphate and Potash a prime candidates for critical minerals designation:

Seasonal Demand – Phosphate and Potash applications are highly seasonal, with critical two-week windows occurring in both the fall and spring. Supply disruptions during these periods, like those that have occurred in recent years, may lead to missed or reduced applications, significantly impacting agricultural yields.

Transportation Challenges – Over half of Phosphate and Potash supplies in the U.S. are transported via rail or barge. Labor strikes, COVID vaccine cross-border mandates, severe weather events (e.g., hurricanes, deep freezes, and floods), and infrastructure bottlenecks can disrupt supply chains, preventing timely application by growers.

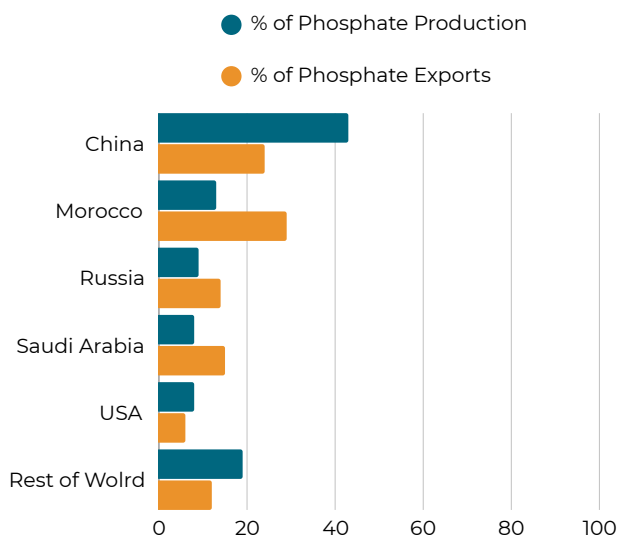
Geopolitical Risks – The global Phosphate and Potash market is highly concentrated, with exports controlled by a few countries. Any disruption in the supply chain, whether intentionally or inadvertently, could lead to fertilizer shortages and sharp price increases.

WHY SHOULD PHOSPHATE BE DESIGNATED AS A CRITICAL MINERAL:

Over the past three years, actions by two leading Phosphate-exporting countries—**China and Russia**—have triggered significant market volatility and price spikes. These two nations account for a combined 38% of global Phosphate exports. Beyond exports, global Phosphate production remains concentrated, with China and Russia controlling 52% of total supply and Morocco adding another 13%. Such a concentration of production leaves the global market vulnerable to supply chain disruptions, whether intentionally or inadvertently.

China (24% of global Phosphate exports) imposed export restrictions, limiting global supply. The growth of EU battery production utilizing Phosphate are also leading to dramatic increases of Phosphate use within China which could have long term impacts.

Russia (14% of global Phosphate exports) disrupted trade flows due to its invasion of Ukraine and the resulting international sanctions.



WHY SHOULD POTASH BE DESIGNATED AS A CRITICAL MINERAL:

Over recent years, strategic decisions by major Potash-exporting countries —**Canada and Russia**—have led to market instability and price fluctuations. Together, these countries represent 59% of global Potash exports. Beyond exports, global Potash production remains concentrated, with Canada and Russia controlling 51% of total supply and Belarus adding another 15%. This concentration poses risks of supply chain disruptions, whether intentionally or inadvertently, highlighting the urgency for its critical mineral designation.

Canada (41% of Global Potash Exports) accounts for the majority (85%) of U.S. Potash imports. U.S.-Canadian trade tensions have increased and led to escalating tariff threats, leading American Potash importers to pay increased prices due to market uncertainty.

Russia (18% of Global Potash Exports) disrupted trade flows and destabilized supply chains due to its invasion of Ukraine and the resulting international sanctions.

