



Material Supply Chain Transparency & Reporting

H.R. 8187, 118th Congress

House Sponsors: Rep. Paul Tonko (NY-20) & Rep. Garret Graves (LA-06)

Critical materials can impact our security

- Critical materials are in everyday technologies like phones, kitchen appliances, and electric vehicle (EV) batteries. They also play a significant role in U.S. national security due to their use in aircraft, magnets, and optics.
- The market for critical minerals is high - reaching USD 320 billion in 2022 (IEA).
- Certain critical material supply chains suffer from **high levels of geographic concentration** that can pose security risks.
 - According to Goldman Sachs Research, China accounts for over 85% of rare-earth element (REE) refining and 90% of manufacturing of REE magnets.
 - Benchmark Mineral Intelligence reports suggest China has 75% of global cobalt refining capacity and 59% of lithium processing capacity.
 - According to USGS 2023 Mineral Commodity Report, the U.S. is at least 50% import reliant for 43 different nonfuel mineral commodities, with 26 coming from China.
- Critical material supply chains are often **linked to human rights violations and negative environmental impacts**.

Digital identifiers can add accountability to critical material supply chains

- A digital identifier is a digital product label that can facilitate the sharing of relevant supply-chain data, including locations of material extraction or processing of components.
- Digital tracing of critical material flow can help reduce security risks, incentivize domestic investments, and ensure high social standards across supply chains.
- Numerous private sector entities and European countries are already working to develop digital identifiers, such as the “battery passport”, to bring transparency to the sources and manufacturing history of EV battery components.

Congress can help shed light on supply chains!

The Critical Material TRACE Act of 2024:

- Establishes a Department of Energy (DOE) program to support voluntary digital identifiers for advanced energy technologies.
- Requires DOE to support or develop digital battery identifiers, that include data on:
 - origins of battery materials, including those from foreign entities of concern;
 - information on recycling, reuse pathways, and end-of-life management;
 - certain chemical, diagnostic, maintenance, repair, and performance data; and
 - any associated human rights, labor, and environmental concerns.
- Requires the DOE to lead robust external engagement, protect confidential business information, consumer privacy, and ensure compatibility with existing relevant standards and laws.