TECHNET
THE VOICE OF AMERICAN INNOVATION

1420 New York Avenue NW, Suite 825
Washington, D.C. 20005
www.technet.org | @TechNetUpdate

April 27, 2026

House Committee on Natural Resources
Subcommittee on Energy and Mineral Resources
1333 Longworth House Office Building

Dear Chairman, Ranking Member, and Members of the Subcommittee:

On behalf of TechNet, we thank you for holding the important oversight hearing on "Powering the 21st Century with American Copper." As demand for artificial intelligence, cloud computing, advanced manufacturing, and modern energy infrastructure continues to grow, a resilient, reliable, and affordable domestic copper supply has become essential to U.S. economic competitiveness, technological leadership, and national security.

Copper is a foundational input for the technologies and infrastructure that will define the next century. It is essential to data centers, semiconductors, transformers, power systems, and the electric grid infrastructure needed to support AI deployment at scale. However, the United States and its allies face a growing copper challenge. Global copper demand is projected to rise sharply by 2040, while supply is not keeping pace. Without action to expand and diversify supply, copper shortages could drive up costs, slow infrastructure deployment, and constrain the growth of critical technology sectors in the United States.

For the technology industry, the implications are significant. AI systems are highly electricity-intensive and require substantial copper inputs across both direct operations and enabling infrastructure. Copper is needed for power delivery, cooling, interconnection, and IT equipment inside data centers, and for the transmission, distribution, and grid modernization investments needed to serve rising electricity demand. If copper supply becomes more constrained, the cost and speed of building the infrastructure necessary to support AI, cloud computing, and digital services in the United States will be directly affected.

This challenge is not limited to mining alone. It extends across the full copper supply chain, including refining, processing, recycling, and recovery. Today, copper smelting and refining capacity remains heavily concentrated overseas, leaving the United States exposed to geopolitical risk and supply disruption. Building a more resilient copper supply chain will require a comprehensive strategy that supports domestic production, expands recycling and recovery, strengthens allied processing capacity, and removes barriers to bringing additional copper resources online.

One immediate and often overlooked opportunity is the recovery of copper from legacy telecommunications infrastructure. America's communications networks were built on copper, but consumers have overwhelmingly transitioned to wireless, fiber, and IP-based services. As legacy copper networks become increasingly obsolete, millions of miles of copper telecommunications wiring remain dormant or underutilized across the country. In many cases, however, outdated state requirements still compel providers to maintain aging copper infrastructure long after consumers have moved on to newer technologies.

These rules now do more than delay network modernization. They also prevent the recovery and reuse of a significant domestic copper resource. Allowing providers to retire obsolete copper networks would support the transition to next-generation communications infrastructure while also unlocking a valuable stream of recyclable copper that can be redirected toward emerging industrial and technological needs. Because copper is fully recyclable without loss of performance, recovered material from legacy networks can help strengthen domestic supply, reduce dependence on foreign processing, and ease pressure on increasingly constrained global markets. Congress should therefore pursue policies that support both immediate recovery opportunities and long-term supply resilience.

First, policymakers should support federal and state reforms that allow telecommunications providers to decommission obsolete copper infrastructure and accelerate the recovery of underutilized copper assets. Millions of miles of legacy copper telecommunications wiring currently sit dormant or underutilized across the United States, superseded by advanced fiber-optic networks and wireless technologies. As noted above, many state regulations still require carriers to maintain aging copper networks—even where almost no one uses them. The evidence shows that these requirements impose large and growing costs with diminishing benefits, and that regulatory reform is economically justified. Removing regulatory barriers to copper retirement would not only allow next generation telecommunications networks to thrive, but it will also allow other technologies including artificial intelligence to rely on this critical supply of recycled infrastructure. Modern communications policy should reflect consumer demand and enable the retirement of infrastructure that no longer serves its original purpose, while helping redirect those materials toward new uses that support economic growth.

Second, Congress should prioritize permitting reform to accelerate domestic copper production. The current timeline for bringing new copper mines into operation is too long and creates serious barriers to meeting future demand. More efficient, coordinated, and predictable permitting processes would help strengthen domestic supply and improve long-term resilience. We appreciated the House's passage of the *Standardizing Permitting and Expediting Economic Development (SPEED) Act*, which aims to set firm deadlines for environmental impact reviews and limit the scope of repetitive legal claims, and hope that the Senate will take up this critical piece of legislation imminently.

Third, policymakers should address midstream processing constraints by encouraging greater domestic and allied refining and smelting capacity, as well as investment in advanced extraction and processing technologies. To do this, policymakers could explore incentivizing domestic and allied processing hubs and invest in advanced extraction technologies, such as Solvent Extraction and Electrowinning (SxEW) and advanced sulfide leaching, which allow operators to bypass traditional, highly concentrated smelting networks and produce refined copper directly at the mine site using 30 percent less energy. A stronger processing base is essential to reducing supply chain concentration and improving the security of U.S. copper supply.

Fourth, tariff and trade policy should be calibrated carefully to avoid raising costs on downstream infrastructure needed for grid modernization, broadband deployment, and AI growth. Policies intended to strengthen domestic production should not inadvertently increase the cost of transformers, electrical equipment, and other copper-intensive components that are already in high demand.

Fifth, Congress should support innovation and workforce development across the mining and materials sector. Investment in advanced mining technologies, including AI-driven geoscience software, hyperspectral imaging, and 3D predictive modeling, can shorten exploration timelines and improve drill targeting, while innovations such as bioleaching and automated hauling can help make lower-grade domestic copper deposits commercially viable with a smaller environmental footprint. Federal support for the next generation of engineers, geologists, and skilled workers will also be essential to building a durable domestic supply chain for copper and other critical materials.

Finally, policymakers should strengthen efforts to combat copper theft and protect critical infrastructure. Rising copper prices have fueled a sharp increase in theft and vandalism targeting communications networks, utility corridors, and other essential infrastructure, with thousands of incidents nationwide causing service disruptions, costly repairs, and public safety risks. In many cases, thieves damage fiber and wireless infrastructure that contains little or no copper, creating outages that can affect emergency communications, hospitals, schools, transportation systems, and local businesses. Congress should support stronger federal penalties for theft and vandalism targeting communications infrastructure, improve coordination with state and local law enforcement, and encourage stronger oversight of scrap metal transactions to make it harder for stolen copper to enter secondary markets. Addressing copper theft is not only a law enforcement issue, but a necessary step in protecting critical infrastructure and preserving valuable domestic copper resources for productive economic use.

To lead in AI and build the infrastructure of the future, the United States must take a more strategic approach to copper. That means strengthening domestic production, modernizing outdated regulations, expanding recycling and recovery, and reducing supply chain vulnerabilities. TechNet appreciates the Subcommittee's

leadership on this issue and stands ready to support policies that help secure the copper supply chain needed to power America's technological and industrial future.

Sincerely,

Linda Moore
President and CEO