

## TESTIMONY – SENATOR TOM BAKK

**Testimony for U.S. House Committee on Ways and Means  
Field Hearing on Trade in America: Agriculture and Critical Supply Chains  
From: Senator Tom Bakk  
Former member and leader of the Minnesota State House and Senate, 1995-2023  
Monday, July 10, 2023, at 2:30 p.m. – Kimball, Minn.**

Chairman Smith and Members of the Committee:

Thank you for the opportunity to testify today on Minnesota's potential to contribute to our nation's critical mineral supply chains and our renewable energy future. As a lifelong Minnesotan, I'm incredibly proud of our state's deep history of responsible mining.

For more than 140 years, Minnesota's iron mining industry has supported the communities of northern Minnesota through job creation and economic development, while supplying materials that have been vital in building America's infrastructure and supporting our national security. In fact, much of the American military fleet that helped the U.S. win the Second World War was made from the iron produced by the hardworking miners on the Iron Range in Minnesota.

What many people don't realize is that northeast Minnesota is also home to vast untapped mineral resources that are key to our nation's future, and in particular, our clean energy transition.

Electric cars, wind turbines, solar panels, energy storage solutions and transmission lines all require vast quantities of critical minerals. A single wind turbine contains almost five tons of copper, and hybrid cars require nearly twice as much copper as a standard vehicle. Nickel is fundamental in the production of batteries for energy storage and for electric vehicles. Cobalt is a key element in rechargeable batteries, and the leading domestic use for platinum group metals is for catalytic converters that decrease emissions from automobiles.

All of these critical minerals are abundant underground in my home state of Minnesota. This undeveloped resource is called the Duluth Complex geological formation, and it's the largest untapped deposit of its kind in the world.

So how significant is the Duluth Complex for our clean energy transition? Let's look at electric vehicles as an example. This deposit contains enough copper to build 310 million electric vehicles and enough nickel to manufacture 200 million electric vehicles. To me, that is mind blowing.

The potential that lies untapped in the Duluth Complex is deeply important to me. For nearly three decades, I proudly represented the communities of northeastern Minnesota, where the deposit is located. And during that time, I've also witnessed firsthand the sharp decline of those same communities. That saddens me.

These materials aren't only needed for the clean energy transition. They will also spur much-needed economic development in an area of Minnesota that desperately needs it.

Since retiring, I have devoted a significant amount of time to serving as a consultant for several natural resources companies in the region.

I believe strongly that developing critical minerals in Minnesota and in the U.S. more broadly is a no-brainer. It's a must do. Opening non-ferrous mining operations spurs American job creation, it strengthens our supply chains and national security, it fuels the green economy, and it ensures we mine these resources under the highest labor and environmental standards.

Yet, numerous mining projects in the U.S., including ones in Minnesota, are facing endless legal and permitting challenges that make it next to impossible to access these resources.

The data is clear – we need to mine these materials if we are going to be successful in combatting the negative effects of climate change. According to the International Energy Agency, meeting the Paris Agreement's climate goals will require a worldwide quadrupling of mineral requirements for clean energy technologies by 2040.

But the United States' reliance on foreign sources of these materials reached an all-time high in 2022. It is frankly unacceptable that the U.S. continues to import critical minerals from areas of the world where environmental and labor standards are practically non-existent. Especially when we have these resources – and companies that are proposing to develop them responsibly and sustainably – here at home.

You know what makes no sense to me? On the one hand we set aggressive goals on reducing our nation's greenhouse gas emissions, and at the same time we're slowing or halting the mining projects that are needed to meet those goals. That means we're importing critical minerals or clean energy end products from across the globe. Consider the greenhouse gas emissions associated with that, when we could instead be producing these items here in the U.S.

We also must not assume that we can continue to rely on others to supply us with these resources. China's latest effort to impose export controls of two critical minerals on the U.S. should be a wakeup call. It is no secret that China has a monopoly on many of the world's critical mineral supply chains. We must act now to accelerate our investment in mining capacity

here in the U.S., or our critical mineral supply chains will become even more jeopardized than they already are.

This means we need to change the narrative around mining in this country. We need to have serious conversations to address the inefficiencies of our environmental review and permitting processes. It's urgent that we stop putting up roadblocks to domestic mineral production, because our ability to avoid devastating supply chain disruptions and build a greener future depends on it.

Thank you, and I look forward to your questions.