

The Dangerous Misperception about the Critical Minerals Supplies for EVs

written by Jack Lifton | February 24, 2023

The most dangerous misperception about the [critical minerals for Electric Vehicles](#) (“EVs”) and for a transition away from the use of and need for fossil fuels is the idea that sufficient supplies of the critical minerals are both in existence and recoverable, but that only the lack of private finance, self-defeating regulation, and politics are preventing their production.

Let’s define critical as “necessary for the implementation of national policy goals with respect to energy, manufacturing, infrastructure, health, and defense”.

Using that definition, [China is ready](#) for its planned future of becoming the world’s richest and most powerful nation, and the United States is well along on its path of losing both statuses.

Today, there is just enough lithium production globally and there is enough lithium processing capacity and battery manufacturing capacity in China for China to build an all-lithium battery electric vehicles (“BEV”) domestic transportation network. And, in fact, this is what China is doing.

But, note that China has now built and commissioned the largest vanadium flow-through battery in the world. The Chinese know that the supply of lithium is limited and so they are broadening their horizon.

Sadly, Western politicians and policymakers are currently

obsessed with “spy” balloons and Russian incursions into their neighboring countries and have failed to notice the importance of stationary storage (which to be fair, they do not understand) of non-lithium battery chemistries.

The [American Original Equipment Manufacturer \(“OEM”\) automotive industry](#) is just following the money, the tax credits for using domestic or friendly sourced lithium, in particular, and doesn't really care about stationary storage.

But there will be no green transformation without massive stationary storage.

So it begs the questions:

- How are we going to allocate precious resources of critical minerals?
- What is going to be the priority? Transportation or grid management and stabilization?
- And, how can you have one without the other?