Domestic mining could supply most of our mineral needs, if only environmentalists would allow it.

Energy, minerals, and metals are indispensable for our American standard
of living. But unlike the case with energy, the U.S. is chronically import-reliant on other nations for the minerals and metals that are needed for
our country’s economy, infrastructure, and military. Mineral imports have
steadily increased for at least the past two decades because draconian
permitting requirements and environmental opposition have made it hard to
supply those needs from sources within the U.S. Now there is not enough
domestic mining to meet robust manufacturing demand.

However, the real problem is that more and more mineral imports are coming
from China, Russia, and third-world dictatorships. The nation’s vulnerability to
a mineral embargo has become sufficiently serious that President Trump issued
an Executive Order (EO) on December 20, 2017, to ensure secure and reliable
supplies of critical minerals for the nation.

For the first time, a presidential EO puts forth an official government definition
of what a “critical mineral” is, along with its role in the economy: “a non-fuel
mineral material essential to the economic and national security of the U.S.; the
supply chain of which is vulnerable to disruption; and that serves an essential
function in the manufacturing of a product, the absence of which would have
significant consequences for our economy or our national security.”

This new definition enables federal agencies and others to focus on how serious
the issue of critical mineral imports has become from an economic, geological,
technological, and manufacturing standpoint.

In response to the president’s EO, the U.S. Geological Survey (USGS) last week
published a list of 35 “critical minerals” that are important for American
economic health and military readiness. The draft list includes aluminum,
platinum, rare-earth elements, tin, titanium, and over two dozen other critical
minerals and metals. These are the minerals that will be required to sustain our
standard of living and begin rebuilding the American infrastructure, as
According to the USGS, as of 2017, the U.S. is importing an alarming 64 minerals and metals in quantities above 25 percent. Of those 64, approximately 35 are imported in various quantities from China, and 10 from Russia. Put another way, we are importing approximately two-thirds of these 64 key minerals and metals.
minerals from *adversaries*.

Worse, the U.S. is 100 percent dependent on imports for 21 minerals and metals now listed as “critical minerals” by the USGS, with more than half of those imported from China. If the 15 rare earths were counted as individual metals, the number of minerals and metals imported at 100 percent would jump from 21 to 35.

The problem is definitely not a shortage of domestic mineral sources. In fact, the U.S. is well endowed with mineral resources, according to numerous reports by the USGS. The nation was much more mineral self-sufficient in the 1990s, when it led the world in mining output. Since then, however, the U.S. has lost much of its capacity to mine, refine, smelt, or process critical minerals and metals because of a broad anti-mining agenda among many of the more militant environmental groups.

The U.S. has lost much of its capacity to mine, refine, smelt, or process critical minerals and metals because of a broad anti-mining agenda among many of the more militant environmental groups. Ironically and unfortunately, “greens” oppose many mineral-resource policies that would actually facilitate environmentally beneficial outcomes, such as renewable energy. For example, the average wind turbine requires over three and a half tons of copper to generate and transmit electricity. The typical thin-film solar panel requires rare metals, such as indium and tellurium, to convert the sun’s rays to electricity. Most hybrid gas-electric vehicles use magnets that include quantities of the rare-earth metals dysprosium and neodymium, while electric vehicles need reliable supplies of lithium, cobalt, nickel, and rare-earth elements to produce smaller, lighter, and more powerful batteries.
The rising price of these metals due to restricted supplies by exporters could mean higher prices for Teslas and Volts, inducing cost-conscious American consumers to feel more comfortable behind the wheel of cheaper gasoline-powered autos. A further irony is that China is steadily racing ahead of the U.S. on green-energy technology — while at the same time Beijing is rapidly building dozens of coal-fired plants across the country to power its industrial and manufacturing base.

Despite these trends, environmental groups continue to impede “green progress” in their unyielding stand against mining for metals and rare-earth minerals that are widely distributed in the mountain states of the American West and Alaska. This de facto moratorium on mining has perpetuated our very unhealthy dependence on China, Russia, and several dictatorships. For example, surging battery demand for electronics and electric vehicles may lead to sudden and unexpected shortages of cobalt, lithium, and copper.

Many if not most of these mineral-import vulnerabilities are avoidable. The U.S. sits on a vast treasure of mineral resources and reserves that are probably more extensive than those of China and Russia combined. The National Mining Association estimates there is in excess of $6 trillion worth of minerals and metals beneath our feet.

Based on USGS reporting, the amount of minerals just on federal lands — America’s mineral endowment, owned by the people — is beyond our imagination. Numbers cannot be assigned to our mineral wealth yet because geologic mapping of these lands, as a first step toward exploration and evaluation of mineral deposits, is lagging. This is partly because of the vastness of federal lands, but also due to poor federal stewardship policies that restrict exploration in areas of known mineral deposits. However, in what could be a huge turnaround for reducing dangerous mineral imports through responsible mining, the president’s EO states that it “shall be the policy of the U.S. to
identify new domestic sources of critical minerals, and increase their
exploration, mining, concentration, separation, alloying, recycling, and
reprocessing; and streamline permitting for creating mines — for the benefit of
the American people and in an environmentally acceptable manner.”

This EO commits the country to reducing its vulnerability from mineral-import
overreliance while paving the way for a cleaner and safer planet through existing
and new technologies used by America’s mining industry. Increased domestic
mining of abundant mineral resources is absolutely necessary for the economic
health of our nation and is a long overdue America First strategy.