

Kyiv victim of Trump's avarice for rare minerals

OPINION

US President Donald Trump's proposal to acquire nearly half of Ukraine's rare earth minerals in exchange for continued security assistance stems from the intensifying US-China rivalry over future technologies, which could complicate the peace process in Ukraine. However, experts believe that not even this proposal would reduce the West's dependence on Beijing.

Economic, strategic battle over Ukraine's riches

In recent years, Ukraine has become a battleground not just for political and military conflicts but also for control of its mineral wealth, which could reshape global economic power dynamics.

Last week, US Treasury Secretary Scott Bessent formally offered a deal to Ukrainian President Volodymyr Zelenskyy, under which the United States would acquire 50% of Ukraine's mineral rights worth hundreds of millions of dollars. However, Kyiv immediately rejected the proposal as Zelenskyy deemed it unfair. He emphasized the need for a long-term economic partnership tied to military and European security commitments.

Some experts view this deal as more than an economic agreement — it is a strategic move by Washington to secure rare earth minerals crucial for modern technology. The US believes that controlling these minerals could grant a nation dominance in advanced technologies. Thus, it is unsurprising that Trump is leveraging Ukraine's political crisis to secure these resources.

However, Kyiv, despite its need for military and economic support, is wary of relinquishing its strategic wealth without winning proper concessions. President Zelenskyy insists

of rare and critical minerals essential for energy, defense, aerospace, and other industries. Among these are lithium, graphite, uranium, gallium, titanium, beryllium, and more. Ukraine holds significant reserves of 20 minerals classified as strategic or critical globally. For example, Ukraine's estimated lithium reserves amount to 500,000 tons, a key component in batteries and critical for electric vehicles.

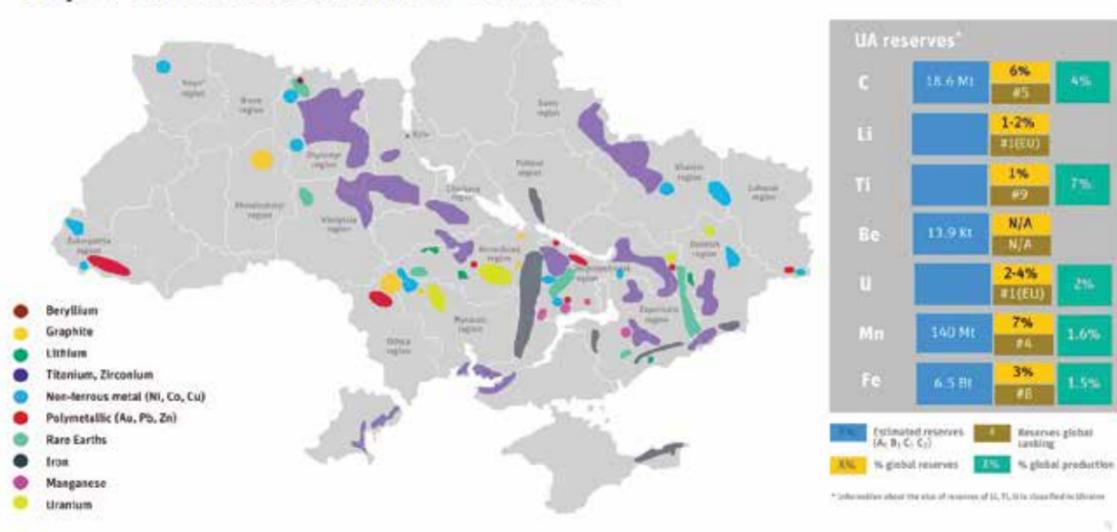
Ukraine is currently not extracting lithium, but successful exploitation of its reserves could make it one of Europe's largest suppliers. Ukraine's graphite reserves rank among the top five globally, with current production from six rich sites at around 5,500 tons. Ukraine's total reserves of graphite, a vital material for batteries and nuclear reactors, are estimated at 13.7 million tons.

Ukraine's list of rare minerals also includes beryllium, the lightest metal on earth, which is extremely rare and highly valued for the aerospace, defense, medical, communications, transportation, and nuclear energy industries. This metal is extracted in only a few countries, with the US, Kazakhstan, China, and Ukraine being the most significant producers. Ukraine's beryllium oxide (BeO) reserves are estimated at 15.3 million tons, potentially meeting global demand for 40 years.



The map shows the deposits of Ukraine's rare earth elements and other critical raw materials (CRM).
● UKRAINIAN GEOLOGICAL SURVEY

Map of Critical Raw Materials of Ukraine



that any agreement over natural resources must be part of a long-term partnership, including explicit security commitments from the US and its European allies. Nevertheless, the US has yet to show a willingness to make such concessions, leaving the negotiations complicated and setting the stage for all possibilities.

As the war continues and rare metals become increasingly important for the global economy, this deal remains one of the key issues on the Ukraine-US agenda; Will Kyiv succeed in imposing its conditions, or will the US force it to accept Trump's terms?

Ukraine's rare metal map

Ukraine boasts abundant reserves

On the other hand, Ukraine has the largest uranium reserves in Europe and is among the top 10 producers of this metal, extracting it from three mines in the Kropyvnytskyi region. Uranium is considered one of the most efficient minerals for producing low-carbon energy, as one kilogram of it can generate energy equivalent to 3,000 tons of coal.

Ukraine is also the fifth-largest producer of gallium in the world, a rare and non-toxic metal that replaces mercury and has unique physical properties, making it highly valued for its ability to convert electricity into light and vice versa. Gallium is increasingly important for the production of iron magnets for wind

turbines and solar panels, and experiments are being conducted to use it in hybrid batteries instead of lithium-ion batteries. The US has recently banned gallium imports from China, and Western countries are looking for alternative suppliers, which could make Ukraine an attractive option for European markets.

Russian Army's control over minerals

Ukraine had planned to expand the extraction of rare minerals in 2021 through a package of tax breaks for foreign investors, but the Russian attack disrupted all plans. More than half of Ukraine's rare earth reserves are currently under Russian control,

in addition to the Crimean peninsula, which Moscow annexed in 2014.

The value of mineral resources in Russian-controlled areas is estimated to be over £6 trillion — or \$7.4 trillion. The value of minerals in the Crimean peninsula alone is estimated to be around £165 billion — or \$204.4 billion.

Any extraction of rare minerals in Ukraine is expected to face challenges due to the Russian military presence in these areas, which could make corporate investments highly risky. In fact, although Ukraine's rare earth reserves are estimated to be worth \$15 trillion, more than half of them are in areas under Russian control, making their extraction difficult.

Beijing's continued dominance

The US is seeking to secure the supply of these precious metals to enhance its global position. The country is the second-largest producer of rare minerals after China. However, the US imports around \$1.5 billion worth of rare earth minerals, including lithium, graphite, zirconium, and titanium.

According to experts, even if

Ukraine's mineral resources prove to be economically viable and Kyiv reaches an agreement with Washington, significant problems will remain, as the US still needs to create a value chain.

For various reasons, Western mining companies, especially American ones, have been unable to create a global business in the rare mineral sector due to environmental and processing challenges, price fluctuations, and intense competition with China.

Extracting minerals is relatively easy, but processing raw materials is extremely difficult and challenging for the West. According to a Bloomberg report, China controls around 60% of refined reserves and 90% of separation and refining capacity. However, Ukraine, despite being one of the top 10 producers of two minerals containing titanium, which are ilmenite and rutile, does not have the grade of titanium required by the US defense industry. Moreover, it lacks the capacity to produce titanium sponges used in aircraft engines and other defense applications.

The article first appeared in Persian on Eghtesad Moaser.



A mining haul truck transports a load at an ilmenite open pit mine in a canyon in the central region of Kirovohrad, Ukraine, on February 12, 2025.
● AP