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Thinkpiece

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Europe & Critical Metals

Poised for Action or Jawboning?

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Poised for Action or Jawboning?

- + In these troubled times, resilience is (maybe) being prioritized alongside (or over) ESG around the world, but will the EU join the trend?
- + A confluence of a resurgence in military spending and the Chinese restrictions (effectively a ban) on exports of dual-use elements have sparked a frenzied hunt for material sourced from "anywhere but China"
- + Europe (well, Spain & Portugal) is the best positioned continent to meet the Tungsten demand surge and should look to advantaging itself first
- + Massive use of munitions in two major conflicts is driving demand for Tungsten & Antimony, while rearmament is adding incremental demand
- × NIMBYism is, by far, the biggest danger for critical minerals resilience
- × The prices of key metals were at derisory levels for many decades and with copious supply from China which suppressed any desire in Europe to "dirty their hands" with mining
- × The Chinese are past masters at price manipulation so one should never discount that they may set the metals prices lower to suit their own aims and confound potential entrants
- × Brussels is not used to dealing with the promotorial class and cannot tell the difference between those that *mine the market* and those that aim to *mine the metal*
- × The environment for funding exploration is mixed with investors looking to pick winners (i.e. developers) not just perpetual drillers going through the motions

The Crucial Fivesome

The proliferating critical minerals lists contain what could charitably be called a lot of padding. The real litmus tests, of what is critical and what is not, are not being applied, so intellectual slackness has set in. The real test is "do as I do" not "do as I say". The frustrating thing for observers of the EU and NATO's European members (not the same subsets) is that there is little actual action, virtually no support and yet a tsunami of verbiage. When the most favoured critical metal story of Brussels is the inconsequential and irrelevant Euromanganese you can tell that the push is yet to reach the serious level.

Thus, when one discards the dross in the critical metals lists one is left with a few elements that can realistically be exploited with minimal environmental harm or footprint. For us, the five elements that should receive the focus in the centres of power, and lesser capitals, are:

- Tungsten
- Antimony
- Tin

- Rare Earths
- Helium

This is with the proviso, of course, that REEs are the Lanthanide group of 11 elements and we would selectively target which of those are important or not, even though they essentially come as a job lot to varying degrees in the mineralisations in which they occur.

The EU Wises Up?

The many decades of delusional policy towards mineral self-sufficiency have come to a screaming halt since the onset of the Pandemic at the turn of the decade. But old habits die hard. The initial response to rising unease about Chinese (and Russian, to a degree) dominance, and attendant dependence upon, for the supply of critical/strategic metals was recourse to the toybox of slogans, buzzwords and soundbites. The Eurocrats trotted out "The Circular Economy" as the universal panacea for the generalized lack of mineral production within the bloc´s borders. This resort to sloganism only succeeded in staving off the evil day in which the EU states grappled with the unpleasant (and dire) truth that the economic bloc was dependent for almost all its mineral inputs upon distant, and possibly unfriendly (dare we say, threatening) nations.

The ”Circular Economy" was solely powered by recycling, *kumbaya* and the power of prayer and clearly wasn´t delivering. Even worse, the politically correct were staring to vocalise that the policy seemed to be proactively NIMBYist and relies upon the production of these desirable elements being concentrated in countries of the Global South, so "Yes, In Somebody Poorer´s Backyard". Not a good look.

The CRMA – Getting Legislation on the Books

The flailing Circular Economy needed a policy shot in the arm that was more than just feel-good verbiage. Then the EU critical minerals initiative shifted to a legislative move with the Critical Raw Materials Act (CRMA). This aimed to secure the EU's supply of essential raw materials by reducing import dependencies and promoting domestic extraction, processing, and recycling. The initiative laid out ambitious targets for EU-based production and processing. It nevertheless fostered strategic partnerships with producer countries and streamlined (in theory) permitting for key projects to meet the growing demand for green and digital technologies.

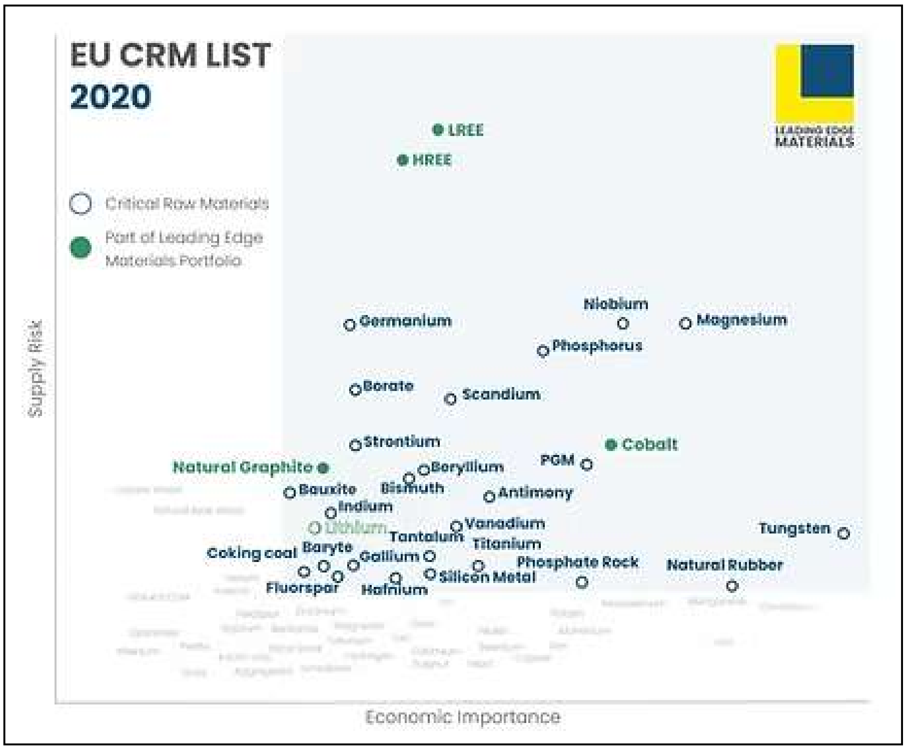
The Critical Raw Materials Act (CRMA) entered into force in May 2024 and identified 34 critical raw materials (CRMs) and 17 strategic raw materials (SRMs) based on their economic importance and supply risk.

- Targets for Self-Sufficiency: By 2030, the EU aims to source at least 10% of its strategic raw materials from domestic extraction, process 40% within the EU, and recycle 25% of its strategic materials.

- Streamlined Permitting: The CRMA aims to speed up the permitting process for designated projects that extract, process, or recycle critical raw materials.
- Strategic Partnerships: The EU seeks to establish long-term partnerships with other countries to ensure a stable supply of critical raw materials.
- Monitoring and Preparedness: The initiative includes mechanisms to improve the EU's ability to monitor and respond to supply chain risks.
- Circular Economy: The Act promotes increased recycling and the reuse of critical raw materials, contributing to a more sustainable and circular economy.
- Focus on Green and Digital Transitions: The identified CRMs are crucial for the green transition (e.g., for batteries and solar panels) and the digital transition (e.g., for electronics).

The Critical Minerals List

First list of CRMs – in 2011, a list of 14 CRMs. This went through various iterations until, in 2023, a fifth list of 34 CRMs was published in the Annex II of the Regulation proposal COM(2023) based on the Study on the Critical Raw Materials for the EU 2023 – Final Report.



Source: Leading Edge Minerals

Below can be seen the list of elements in the EU's sights. We have made some annotations. Firstly, we note whether they are vulnerable to China dominance of not. Many lists are predicated on the Chinese being the largest producer or not but this, by no means, gives China a stranglehold on any particular metal. In some cases, they control the smelting/processing but not the mining. Thus they can be replaced.

Element	China Vulnerable	Potentially European Sourced	Notes
Bauxite	No	No	
Antimony	Yes	Yes	Potential in Slovakia/Spain/Italy/Kosovo/Macedonia
Arsenic	No	Yes	
Baryte	No	Yes	Primarily concentrated in Germany & Bulgaria (reworking tailings), with significant historical deposits in Ireland & UK
Beryllium	No	No	US dominated
Bismuth	No	Yes	
Boron/Borate	No	Yes	Project in Serbia, largest producer is Turkey
Cobalt	No	Yes	Production in Finland
Coking Coal	No	Yes	
Feldspar	No	Yes	Imerys and other major producers operate feldspar mines and processing plants in Germany, Spain, Italy, Turkey, and Portugal
Fluorspar	No	Yes	
Gallium	No	Yes	Potential from historic red mud tailings
Germanium	No	Yes	Potential from zinc mines and flyash deposits
Hafnium	No	No	Sourced mainly from mineral sands around Indian Ocean
Helium	No	No	High vulnerability/dependence
Heavy Rare Earths	Yes	Yes	
Light Rare Earth	Yes	Yes	
Lithium	No	Yes	Production in Austria
Magnesium	Yes	Yes	Projects include Verde Magnesium in Romania, MFE Magnesium For Europe in Bosnia-Herzegovina, and Nedmag B.V. in the Netherlands
Manganese	No	Yes	The Chvaletice project in Czechia and potential in Slovakia
Natural Graphite	No	Yes	Some thwarted production in Sweden
Niobium	No	Yes	Penouta Mine in Spain
Platinum group metals	No	Yes	Production in Finland
Phosphate Rock	No	Yes	
Phosphorus	No	Yes	
Scandium	No	Yes	No production and no real demand
Silicon metal	No	Yes	
Strontium	No	Yes	Spain was leading producer
Tantalum	No	No	Penouta Mine in Spain
Titanium metal	No	Yes	Sourced mainly from mineral sands around Indian Ocean
Tungsten	Yes	Yes	Production in Spain/Portugal/Austria
Vanadium	No	Yes	Potential recovery from slag in northern Sweden
Nickel	No	Yes	Production in Finland
Copper	No	Yes	Deposits in Bosnia/Spain/Wales

In some cases, they control pricing through this processing mechanism but again this is not a position that is unassailable. In many metals the Chinese are as vulnerable as the West, a good example being

Cobalt or Tin or even Nickel. The DRC and Indonesia have shown an ability to crack the whip over China as far as value-added processing is concerned. Europe we should note has enormous roasting/smelting/processing capabilities and infrastructure. It has just not prioritized creating vertically integrated supply chains, but this appears to be happening.

Then we used a filter of whether the European economies could source these metals internally and in virtually every case this appears to be the case. Possibly not in the quantities required (e.g. copper and nickel) but these are not metals that are under the dominance of Chinese mining with multifarious sources that are "open for business" whether it be Chile or Argentina in the case of copper and south east Asian sources in the case of nickel, e.g. Indonesia and the Philippines (or a host of other sources).

Even Helium, which we have marked as potentially not available in sufficient quantities, may indeed be available as shall be noted from further on in this note. While Hafnium which is gleaned from mineral sands which are prolific around the Indian Ocean and not corralled/controlled by China, by any means.

In reality, most of these critical metals lists do not stand up to much scrutiny from those that know the individual dynamics and sourcing of these elements. Some inclusions bear more resemblance to a "Letter to Santa" then any serious or informed assessment! Then as we shall later note, with the major mining equities market of Europe being London and the EU still in a churlish sour-puss mood since Brexit they prefer in Brussels to not consider assets onshore in the UK (of which Fluorspar, we might note is potentially one and the massive Tin revival underway) or moreover the London markets' control over other critical elements such as Tungsten, Tin and Rare Earths. There are none so blind as those that will not see.

Picking Champions?

In March 2025, the European Commission identified 47 strategic projects across 13 EU countries to boost domestic production and processing capabilities. Australian and Canadian companies, in pursuit of some of these funds and, moreover, to put themselves on the EU's radar, participated in the European Institute of Innovation and Technology (EIT) Raw Materials Summit in Brussels, in May 2025, seeking out funding and strategic partnerships.

The European Raw Materials Alliance was formed in 2020 to secure a sustainable raw materials supply in Europe. It is specifically targeting the ReArm European plan, a defence initiative with an estimated €800 billion in potential funding focused on European-made equipment.

Below we show the list of the currently anointed after the purely processing/smelting candidates have been removed. This reduced the list by half and left a list which looks extremely biased towards the widely worshipped EV under its umbrella of the Energy Transition and little focus on the metals that makes the wider wheels of the industrial sector (e.g. the German Mittelstand) keep turning. Military metals get scant consideration and therein lies the rub.

Ageli	Integrated: Extraction and processing	Eramet	France	Lithium (battery grade)
Aguablanca Project	Extraction	RIO NARCEA RECURSOS S.A.	Spain	Cobalt, Platinum Group Metals, Nickel (battery grade), Copper
Barroso Lithium Project	Extraction	Savannah Lithium Unipessoal, Lda	Portugal	Lithium (battery grade)
CAREMAG	Processing	CAREMAG SAS	France	Rare Earth Elements for Magnets, Boron (metallurgy grade)
Chvaletice Manganese Project	Integrated: Extraction and processing	Euro Manganese Inc	Czechia	Manganese (battery grade)
Cínovec lithium project	Integrated: Extraction and processing	Geomet s.r.o.	Czechia	Lithium (battery grade)
Emili	Integrated: Extraction and processing	IMERYS Ceramics France	France	Lithium (battery grade)
KELIBER LITHIUM PROJECT	Integrated: Extraction and processing	KELIBER TECHNOLOGY OY	Finland	Lithium (battery grade)
Kolmisoppi	Extraction	Terrafame Ltd	Finland	Nickel (battery grade), Cobalt
La Parrilla Mine (P6 Metals)	Integrated: Extraction and processing	Iberian Resources Spain	Spain	Tungsten
LAS NAVAS	Extraction	LITHIUM IBERIA, S.L.	Spain	Lithium (battery grade)
Metlen BAUX-EU, GALLANT, LEADER	Integrated: Extraction and processing	Metlen Energy and Metals and European Bauxites	Greece	Bauxite/alumina/aluminium, Gallium
MINA DOADE PROJECT	Extraction	RECURSOS MINERALES DE GALICIA, S.A.	Spain	Lithium (battery grade)
Mining project EL MOTO	Extraction	ABENÓJAR TUNGSTEN S.L.	Spain	Tungsten
Neves Corvo - 3RD SILO, LOMBADOR, Semblana	Integrated: Extraction and processing	SOMINCOR	Portugal	Copper
Polymetallic primary sulphite project PMR project	Integrated: Extraction and processing	Cobre las Cruces S.A.U.	Spain	Copper
ReeMAP Project: Malmberget, Lulea Industrial Park, Per Geijer	Integrated: Extraction and processing	LKAB (Luossavaara-Kirunavaara AB)	Sweden	Rare Earth Elements for Magnets
Romano Mine	Extraction	Lusorecursos Portugal Lithium S.A.Lithium	Portugal	Lithium (battery grade)
Rovina	Extraction	Euro Sun Mining Inc.	Romania	Copper
Sakatti Project	Integrated: Extraction and processing	Anglo American Services (UK) Ltd.	Finland	Cobalt, Platinum Group Metals, Copper, Nickel (battery grade)
SALROM Baia de Fier	Extraction	Societatea Națională a Sării S.A.	Romania	Graphite (battery grade)
Talga Natural Graphite ONE	Extraction	Talga AB	Sweden	Graphite (battery grade)
Verde Magnesium	Extraction	Verde Magnesium SRL.	Romania	Magnesium Metal
Zero Carbon Lithium	Extraction	Vulcan Energie Ressourcen GmbH	Germany	Lithium (battery grade)

Looking down this list we wonder whether, maybe, the EU is only interested in projects that lack viability in a standalone state or have a crowd of hostile natives with pitchforks blocking the gates.

It would be even more interesting to rate these projects by doability, but that would require capex numbers, more information on their owners financial wherewithal and offtaker willingness. With Eramet positioned in one of the largest Argentine salares, Centenario/Ratones, then how can Ageli compete with such a Big Borther in the corporate portfolio except with EU/Paris support?

We would note that Talga (ASX: TLG), with its Swedish project, is not on its first go around the block and wonder about its interdependence with the now defunct Nordvolt battery scheme. Talga's project has received key backing at the European Union level. It has secured a €70mn (AUD$197mn) grant from the EU Innovation Fund. We had previously been watching this space through Woxna graphie mine of Leading Edge Minerals (TSXV: LEM | Nasdaq First North: LEMSE | OTCQB: LEMIF) in the same product in the same country that has been spinning its wheels for well over a decade. We covered this as long ago as mid-2014.

Breaking Up is Hard to Do – But Not Impossible

The European members of NATO were berated early on in the Second Trump Administration as to their (relative) portion of GDP dedicated to their defence budgets. The cynical felt that this was just a campaign to get them to *Buy More American*. Things started to go sour with a blizzard of abuse, many sticks and virtually no carrots, and then relatively recently the concept of invading Greenland, a territory of Denmark, in blatant breach of NATO principles. Though there was some public musings that this might mean the end of NATO, those of the *Realpolitik* school knew it was the end of NATO and just did not want to say it publicly.

Even before this the Europeans had already been starting to consider bolstering their military via unified militaries or more cooperation. This concept was dealt a sort of deathblow with Spain breaking ranks on supporting the Israeli (and US) war on Iran and then the rest of Europe forming a *Coalition of the Unwilling* and firmly sitting on their hands. If the Royal Navy could have sailed in an opposite direction without it being too obvious, they would have done so. No amount of abuse made the nations change their courses and no amount of assistance to "the cause" received appreciation.

If there has been any (immediate) lesson from the *Weekend War* (now a month long) it is that the US cannot be relied upon. Its technology is not failsafe (i.e. frequently does not do the job), it is unreliable as to who it will prioritise (ask the South Koreans), it is expensive and the weaponry is not copious and bottomless (ask the Israelis, not that we care for their opinion). The words "protection racket" have been applied to the treatment meted out to the hapless Gulf states and this concept by extension can be applied to the *Buy American* policy of NATO which effectively atrophied much of the European arms industry in obeisance to the US's military-industrial complex in the interests of fungibility of weaponry between the different forces.

Many took Eisenhower's classic warning upon leaving the Presidency to be directed to the American public, when the European politicians and militaries should have also taken heed.

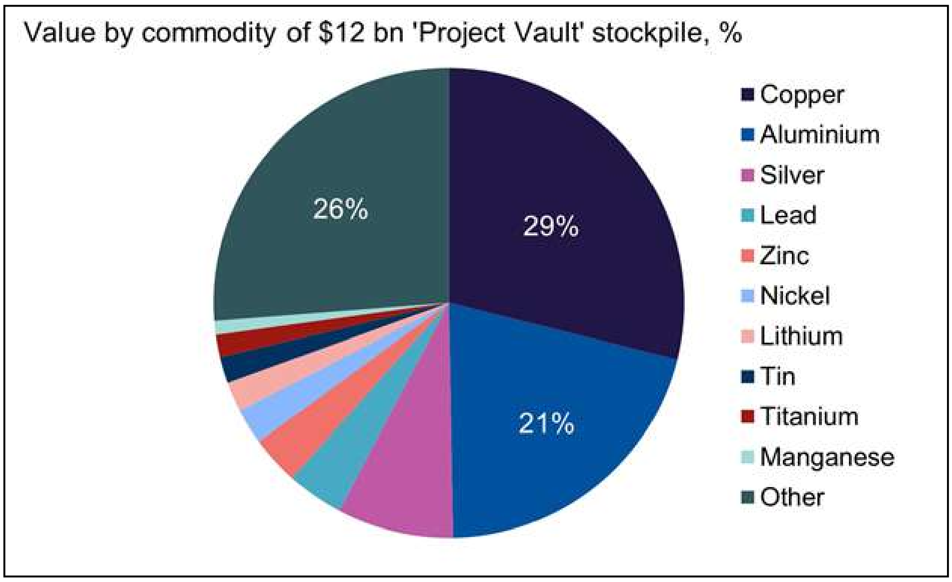
The companies that make up the European military-industrial complex are much reduced from their WW2 heyday and much of that institutionalized decline might be attributed to the one-sided co-dependency with the US and its pushers of Buy American military technology. However, as the price chart of Rheinmetall and others demonstrates there is money to be made out of not buying American. We would expect this to be a growing tendency.

The irony here is that the European continent is better positioned to supply its own Tungsten and Antimony needs to its own military-industrial complex than the North American continent is.

A European Vault?

In February 2026, President Donald Trump announced Project Vault—formally, the US Strategic Critical Minerals Reserve. We have been sceptical of this as it seemed to be more directed towards PR than actually strategic rationales.

Project Vault is structured as an independently governed public-private partnership—not a government agency program, such as the historical Strategic Petroleum Reserve. The Export-Import Bank of the United States (EXIM) approved an up to US$10bn direct loan, the largest financing commitment in the agency's 92-year history.



Approximately US$2bn in private capital will complete the initial capitalization. Trading companies Hartree Partners, Traxys North America, and Mercuria Energy Group have been designated as the procurement agents responsible for sourcing materials for the reserve, some even already signing offtake memoranda with critical mineral providers.

Unlike traditional government stockpiles that store materials against broadly defined national security contingencies, Project Vault is demand-led. Participating original equipment manufacturers (OEMs) identify which minerals they require and the grade and volume required and make long-term financial commitments to the program.

Non-US companies from countries that have signed critical minerals frameworks or MOUs with the United States—including Australia, Japan, and the United Kingdom, together with other bilateral partners announced through February 2026—may be favorably positioned under this evolving fast-track architecture.

The Road to Hell is Paved With Floor Pricing

On the pricing side, the bilateral frameworks concluded with Australia and Japan in October 2025 include explicit commitments to cooperate on price floor mechanisms—standards-based systems designed to ensure that allied-producers can operate competitively against subsidized Chinese supply. The multiple new frameworks announced at the Critical Minerals Ministerial hosted by Secretary of State Rubio in early February 2026 - covering Argentina, the Cook Islands, Ecuador, Guinea, Morocco, Paraguay, Peru, the Philippines, the United Arab Emirates, the United Kingdom and Uzbekistan—may incorporate similar provisions and aim to boost investment in processing in certain partner countries, though the full substance has not yet been publicly disclosed. Negotiations are reportedly in progress with an additional 17 countries. The Trump Administration has also announced plans to hold negotiations with the European Union and Mexico regarding cooperation on price floor mechanisms.

The Capital Markets

The capital markets in Europe have (mostly) lost their mining components, with the exception of the UK. There is, however, something on a minor renaissance going on in Scandinavian stock exchanges. The bulk of continental exchanges have seen massive shrinkage in the number of mining stocks down to levels of almost irrelevance.

However, the truism that European investors are not interested in mining stock investments is indeed a falsehood, as evidenced by the dramatic recuperation in the interest in dual-listed stocks on the Frankfurt Stock Exchange in the last few years. This has repeated and augmented the trend that existed at the tail end of the so-called *Commodities Supercycle* when the alternative listings on German exchanges came to grief in 2012 with many investors losing their shirts. It took nearly ten years for that bitter memory to be erased.

There have however been many foreign miners that have found receptive audiences over the decades in the Swiss markets.

This then begs the question, if investors are interested and participate, of why exchanges and their regulators have been so cautious (to the point of catatonia) in encouraging primary or full listings.

This situation has caused a number of side effects. The listings are primarily in Australia and Canada. The executive teams are thus in these countries, the decision makers for the companies and the regulators. European governments are thus at two or three removes from boards and managements at those companies that are developing critical metals projects of interest to the EU and individual European governments.

Tungsten

If we had to choose a metal to crown as the military metal *par excellence* it would undoubtedly be Tungsten for its usage in shells/missiles and in armour-plating to resist said shells.

It’s worth noting of all the critical metals in the military sphere it is Tungsten where the Europeans find themselves best positioned and, inarguably, way ahead of the US. While Tungsten means “heavy stone” in Swedish, its main source since its rise to industrial usage has been the Iberian Peninsula. This produces an interesting history which has relevance today because it is the back-story to the massive tug of war over Portugal and to a lesser extent Spain during WW2. In this story lies some good examples of our “supply & deny” watchwords.

Following the invasion of the Soviet Union, Germany became dependent on Portugal and Spain for their Tungsten supplies, due to its value in producing war munitions. To maintain its neutrality, Portugal set up a strict export quota system in 1942. This concept of neutrality through equal division of products supplied to belligerents was different from that of the Northern European neutrals who worked on the basis of "normal pre-war supplies". However, in January 1944, the Allies began pressuring the Portuguese dictator Salazar to embargo all Tungsten sales destined for Germany. Portugal resisted, defending their right as a neutral state to sell to anyone and fearing that any reduction in their German exports would prompt Germany to attack Portuguese shipping.

Despite the seeming closeness of Franco to Hitler, he was also a fence-sitter and had to do an even more perilous balancing act, thinking forward to what might happen if he was unequivocally seen as tied to the Nazis should they not win. At the top end of Europe, Hitler had neutral Sweden blackmailing him over iron ore supplies and to the East he had to contend with a “friendly” Romania over oil supplies. Such is the dilemma, writ small, that China will have if it ever decides to go ballistic (pardon the pun).

Tungsten production was almost driven out of Europe but the stalwart efforts of Almonty Industries (NASDAQ: ALM | TSX: AII | ASX: AII | FSE: ALI1), backed by powerful players in the machine tools industry that kept operations on the road by paying over the depressed market prices to keep themselves free of the Chinese threat to their fundamental businesses.

So, as noted, the irony is that Europe is way ahead of the US in Tungsten production with mining operations in Portugal, Spain and Austria. The UK is soon to be added to this group of producing nations. None of this is by design, we might note, but rather historical momentum. The potential to turn back on substantially more production in the Iberian Peninsula (and the UK) is particularly poignant. One might almost say that the closest that Europe comes to achieving self-reliance in any critical metal is in Tungsten. The Circular Economy concept is defective here though as little Tungsten is recyclable, particularly that in munitions.

Almonty’s main operation is the Panasqueira mine in Portugal which moved into poll position amongst European Tungsten mines when Almonty’s other operation, Los Santos (which we visited and wrote up in 2015), which is in north-west Spain, came to the end of its mine-life recently but is now being rebooted as a tailings reprocessing operation. The company is keeping its powder dry thus far on the greenfield Valtreixal mine/project, which is relatively near to Los Santos.

Wolfram Bergbau operate the Mittersill mine in Austria (near Salzburg) that has been functioning since 1976. A company called Allied Critical (CSE: ACM | OTCQB: ACMIF | FSE: 0VJ0) is trying to revive two old Tungsten mines in northern Portugal. These being the Borralha and Vila Verde Tungsten Projects.

Other Tungsten assets have been through the meatgrinder of financial travails and bankruptcy. Wolf Minerals went bankrupt on its Hemerdon Tungsten/Tin mine in south-west England. Hemerdon then passed into the hands of Tungsten West plc (LSE: TUN). Ormonde Mining came to grief on the Barruecopardo mine in Spain and that asset passed, through private equity hands (Saloro), to EQ Resources (ASX: EQR) that had revived Mt Carbine in Queensland. Meanwhile, W Resources plc, holders of the La Parrilla mine in Spain (which now features in the EU wishlist), delisted from the London Stock Exchange, disappearing from sight.

Tungsten is, poignantly, the element that has achieved the most with the least support from the Brussels *nomenklatura*.

Tin

Tin has not been subject to a Chinese dual-use ban or indeed any restrictions. That is not to say it may not be, but while China is the biggest importer of concentrates and the largest exporter of finished tin material the West has ways of building a by-pass around China should it wish to. Europe has long had tin resources and mining thereof.

In the rankings of the oldest “military metals”, after iron ore, the next two are copper and tin, which moved civilization from the Iron Age to the Bronze Age. And Tin has the distinction of being probably the ore that travelled farthest first, in that the Phoenicians ventured as far as Cornwall to get their hands on it. This started the ascendancy of southwest England to a primacy in Tin production that lasted for three thousand years. It is ironic then that after a near total collapse of Tin production in Europe since the 1980s, it is the same region that is leading the charge in the revival of mining of the metal in Europe. While the South Crofty Mine of Cornish Metals (LSE: TIN) and the Hemerdon Mine of Tungsten West (LSE: TUN) should be delivering metal in the near future one should not be surprised to see other tin mine revivals in the area.

The private company, Cornish Tin, has as its flagship project the Great Wheal Vor group of 26 former producing tin and copper mines in the Mining District of Breage, Cornwall.

Iberia was one part of Europe where Tin mining clung on longest and is still represented in a small way. That is not to say that the potential to reboot the Tin potential of Portugal and Spain is small. Particularly at current prices and given a pivot away from “putting stones in the road” by governments (mainly provincial in the case of Spain) there could be a major renaissance. The ASX-listed Elementos (ASX: ELE) has fought the good fight against the forces of darkness and seems to be winning. Also notable is that Spain possesses a legacy refining/smelting industry that can take on the task of creating metal from concentrates.

Further afield, other traditional tin mining areas straddle the German/Czechia border and are being pursued by the likes of LSE & ASX-listed First Tin (LSE: 1SN) on the German side.

Then in Slovakia, there is a Tin project with extensive U/G workings and an MRE from the Soviet era with which we are associated.

Here in Tin, we see again the role of LSE-listed entities in advancing projects to production with the surprising result that the UK should be Europe's leading Tin producer within a year or two.

Lithium

We mention this in passing as it is well-know that we do not favour u/g spodumene over brine salares. Rio Tinto is on the verge of being the largest Lithium producer on the planet (through its Argentine *salares*) and has only met frustration in Europe (the Jadar project in Serbia). And Eramet, the French mining giant, is positioned in one of the largest Argentine *salares*, Centenario/Ratones after ethnically cleansing out its Chinese partners there.

With Lithium (and local opposition) there are the thwarted activities at Cinovec (Zinnwald or Tin Forest) on the Czechia side. Its Tin aspect however is seldom mentioned. That project has been driven by European Metals Holdings (ASX: EMH), an ASX- and UK-listed explorer/developer, that in 2020 attracted ČEZ Group, the Czech state energy company, into taking a 51% stake in the Cinovec project. Then the EBRD threw its support behind it. But NIMBYs lurked *in them thar hills*.

In early 2025, the European Commission identified the Czech deposit as one of 60 "strategic projects". This is a fairly graphic example of NIMBYs at work, and they have also thwarted a Lithium project (the Barroso mine of Savannah Resources – LSE: SAV) in northern Portugal despite Lithium mining not being a toxic or polluting activity (if done right). Both are on the EU list on page 7 of this note.

Antimony

For our commentary on this crucial metal see Appendix II of this note.

Rare Earths – Much Ado About Something

The generalized panic over the Rare, but not rare, Earths space has also set off alarm bells in Europe but Europe has a lot less to be panicked about the US. There is a large legacy REE infrastructure in Europe that frankly puts the US to shame.

The two leading REE refineries outside China are in Europe, namely the Silmet facility in Estonia of NeoPerformance Materials (TSX: NEO) and the La Rochelle refinery in France owned by the Berlgian chemical giant, Solvay (SOLB:BE). To get up to speed on the latter one might reread our note on Solvay & Rare Earths.

Beyond that we have companies like Less Common Metals (LCM) in the UK and REETech in Norway. Other processors include VacuumSchmelze in Germany (and Finland). LCM, based in Liverpool, was a survivor of the First REE Boom/Debacle, being associated in those days with Great Western. It has recently fallen into the orbit of the Gutnick-linked USA Rare Earth (singular) and hopefully shall not meet the fate of many Gutnick-led ventures downunder. The latter company is a **SHORT** call in our Model Resources Portfolio.

Solvay's position in the space came from it acquiring Rhone Poulenc, which earlier had acquired Rhodia-STER, the home grown giant of REE in Europe (which curiously once owned a stake in Bayan Obo and had expedited the development of the massive Chinese mine). In November of 2025, Solvay announced a strategic agreement with Permag (US) and Less Common Metals (LCM) to secure a reliable supply of Rare Earth materials. Permag, a leader in high-performance magnetic solutions, was looking to secure a stable & predictable supply of Samarium, for high-performance magnets and magnetic assemblies. Material will be sourced from the La Rochelle facility with Solvay bringing to the deal its mixed rare earth concentrates as well as its separation technologies to produce pure Samarium oxides, while LCM contributes with industry-leading metallization process expertise, creating a strong foundation to meet demand over the next 3–5 years.

Then there is Caremag which is located in the general vicinity of Solvay's La Rochelle facility. The leading light in this joint venture is Carester, a French company specialising in the refining of rare earth elements, critical materials for the energy transition and cutting-edge technologies. This had been founded in 2019 by Frédéric Carencotte and a team of international experts.

The Caremag facility will recycle 2,000 tonnes of magnets and refine 5,000 tonnes of mining concentrates annually making it Europe's first large-scale Rare Earth recycling facility and the largest western producer of purified Heavy Rare Earths. It will have an estimated output of 600 tonnes of Dysprosium and Terbium oxides (representing around 15% of the global production) and 800 tonnes of Neodymium and Praseodymium oxides, going some way towards meeting the needs of European OEMs.

The structure of the project rests on the support of France and Japanese partners, JOGMEC and Iwatani Corporation, and their joint venture, "Japan France Rare Earth Company", which will invest up to €110 million in equity and shareholder loans in the Caremag plant. This is underpinned by a long-term supply agreement to provide Japan with HREE oxides.

The French government also is providing support in the form of subsidies and repayable advances granted under the France Relance and France 2030 project calls, as well as a Green Industry tax credit granted in July 2024, totaling €106mn. There is also support from the Nouvelle-Aquitaine region and TotalEnergies through its Induslacq platform.

The listed mining plays in the European space are almost all concentrated on the much-maligned

London Stock Exchange. These are Rainbow Rare Earths (operating in South Africa), Mkango (with a project in Malawi), Pensana (supposedly with a project in Angola) and an imminent RTO of a central African project into an LSE shell. Mkango also has a recycling operation in Poland while Pensana claims to be evolving a processing complex on Teeside in the north of England. There is also a company Altona Rare Earths (LSE: REE) with a project in Mozambique.

External players in mining (or wanting to or claiming to want to) are not many in number but we might mention Leading Edge Materials (TSX-V: LEM | OTCQX: LEMIF | OMX: LEMSE | FSE: 7FL) with its NIMBY-blocked Norra Kärr project in southern Sweden. A prize hopefully awaits this company as it has tied itself in knots like a pretzel over 15 years of development trying to appease local malcontents trying to thwart its project. The irony is positively dripping here as Swedish scientists were the original discoverers of many rare earths and several elements in the Lanthanide series are named after places is southern Sweden. So go figure…

Over and Beyond

We shall look at one gas and one metal that figure on the EU Critical Minerals list. The gas is Helium, where European users are very vulnerable while the metal is Manganese which we regard as plentiful and largely sourced from amenable jurisdictions, thus not really critical.

Helium – Truly Dire

The current war in the Persian Gulf has rung alarm bells around this element in elevated circles but not amongst the public that imagine it as linked to party balloons when it is in fact vital in chip manufacture and medical and data applications.

There is little actual European supply of Helium. Reports indicate that, in 2025, Poland produced some 3mn m^3, or 1.6% of world supply. Ironically this matches the production of Helium in China. Poland ranks seventh in the world in terms of amount of helium resources with almost 24 million cubic metres of proved reserves. It is also the only producer of helium in Europe. Virtually no Helium is recycled (except some from MRI facilities) so there goes the *Circular Economy* argument for this element.

Helium associated with North Sea gas fields and groundwaters on the UK mainland is dominantly radiogenic, produced by decay of U and Th in the continental crust. The other source is so-called mantle-derived. A minor component (< 1%) of mantle-derived Helium with promordial 3He, may be present in some gas fields close to the North Sea Central Graben. Further south along the more active part of the same fault system in the Rhine Graben this component reaches >15% in groundwater samples.

A study was undertaken of the Magnus oilfield, located in the East Shetland Basin, in the northern North Sea. This study represented the most detailed investigation of noble gas isotope systematics in a liquid hydrocarbon reservoir yet undertaken. Samples from nine producing wells across this Middle Jurassic field were taken and the Helium, Neon, and Argon isotopic ratios and abundances in the oil were determined. Both the Helium and the Neon isotope systematics require a contribution from a mantle source. If the mantle endmember is modeled using mid-ocean ridge (MOR) values, 2.3%-4.5% of the 4He and 4.3-6.2% of the 21Ne is mantle-derived. The remainder of the 4He and 9%-12% of the 21Ne is crustal-radiogenic and the remaining 21Ne is atmosphere-derived.

Thus, back to Poland. Helium resources were first evaluated in Poland (the Goczałkowice-Dębina deposit in the Upper Silesian Coal Basin) in 1964. Interestingly disclosure of Helium content is mandated by law (Regulation of the Minister of the Environment, dated 1 July 2015, on the geological and investment report of a hydrocarbon deposit). This requires that holders of deposits with a minimum average helium content in natural gas of 0.2% vol. obliges the user of a natural gas field to evaluate its resources of helium. So far, helium resources have been identified in 21 natural gas fields.

This begs the question as to whether the European sources of Helium may be much bigger and just not as thoroughly sourced or researched as Poland has done. Then there is the issue that with the EU mania to disengage from gas production/dependence may in fact be eschewing the possibility to exploit Helium in a more industrialised manner to satisfy the continent’s needs and wean itself off distant unreliable sources.

Thinking About Manganese

Bizarrely, the EU made a commitment to Manganese in backing the Chvaletice tailing reprocessing project in Czechia. This project seemed interesting when we first heard of it last decade, before it was even listed. Then, however, it became enmeshed in a tidal wave of hype and the numbers started ballooning as the company came to see the EU as a (sacred) cow to be milked. Being tailings reprocessing it scored “double points”, as it could allow the Eurocrats to worship at two shrines simultaneously, i.e. clean up and having their Circular Economy delusions fulfilled. Its production was expected to be a mere 48,000 tpa of Mn should it actually produce. The company is a **SHORT** call in our Model Resources Portfolio.

However, does the EU need to feel its supply chain for Mn threatened when the USGS estimated global production in 2025 of Manganese was 20mn tonnes (yes, millions) of which only 690,000 tonnes was in China and fully 14.6mn tonnes comes from three African countries (Gabon, South Africa and Ghana)? To make claims of China domination even more unfounded we would note that Gabon output is dominated by the French company Eramet and the South African is dominated by the Australian company, South32. Frankly, panic should be moderated on this element.

Then more recently, in mid-March of 2026, the appearance of another entrant to the Manganese “race” in Europe. This was a company called Nuclear Vision Limited (CSE: NUKV) that had previously not been on our radar as its focus had been on Uranium in Botswana. The thing that caught our eye was its optioning of a 100% interest in two manganese carbonate projects, Svabovce and Michalova , located in the heart of Slovakia's "emerging Battery Belt". We must confess to being more inserted in Slovakia than in any European mining jurisdiction, except maybe Spain and this was the first time we had heard of this "Battery Belt". The attractiveness rests upon both projects being positioned within 300 kilometers of major automotive and battery manufacturing hubs, including facilities for Volvo and Gotion-InoBat.

Nuclear Vision paid an aggregate of €100,000 and issued an aggregate of 10,000,000 of its common shares at a deemed price of $0.24 per share for an existing option to purchase agreement. Under that agreement, the assignor held an option to acquire a 100% interest in the projects.

The company agreed to acquire the operating rights and license to the projects and intends to transfer the licenses to a new wholly-owned Slovak corporation. The Svabovce Project consists of a 47.24 km² granted exploration license and the Michalova Project is contained within a 14.34 km² granted tenement.

This could be interesting and we await further details. We discuss some of the dynamics of Slovakia in the Case Study I.

Risks

There are a number of potential risks that should be taken into consideration:

- China abandons its dual-use export ban for key metals
- An outbreak of peace
- Environmental (or NIMBY) issues
- Financing difficulties for exploration projects

When is an export ban not an export ban? The answer is when the product is shovelled out the backdoor in defiance (or compliance) of/with the will of Peking. Quite clearly China leaks. The Gallium/Germanium ban was the "first cab of the rank" and initially caused a panic until more and more product appeared from mysterious sources and the prices stabilized. Additionally, the West (probably with China's acquiescence) found ways of declaring certain offtakers and intermediaries to not be dual-use parties and thus it was business (almost) as usual. One has had the same impression about Antimony in recent times. We always had the feeling that the Chinese were not prepared to sacrifice their carefully honed relationships with the fire retardants market to save the exported metal from ending up in bullets. Chinese exports were reported as almost zero and yet material still seemed to be around. Prices went to $60k per tonne and then plunged to $20k of late. Supply crises need to be made of sterner stuff.

The Chinese dual-use ban on Tungsten has pushed up the price and made the handful of serious players in that space (most in Europe) immensely viable. A definite own-goal for Peking.

The EU in particular has a tendency to respond with "Phew, that was close" when a crisis blows up and then dissipates. It gives them an out from doing something or making a long-term decision. The persistence of some of the recent wars and the drastic dissipation of *materiel* in the Ukraine confrontation means that even the end of the war there will not take the EU back to the *status quo ante* in terms of stockpiles or reserves of weapons and metals to make them. Brussels and NATO will need to put nose to the metals grindstone for the long-time whether they like it or not.

NIMBYs come with the territory in Europe. They are a particularly noxious breed as no amount of mitigation and no footprint is too small to stop these intrepid bands. They are frequently stirred up by outsiders, and we particularly view the Serbian protestors against Jadar as being stirred up by Chinese interests wanting to get their hands on the project or thwart European battery industry development. The main solution here is for them to be over-ruled from above with some sort of *force majeure* declaration, in the interests of <u>resilience</u>, from the centre (Brussels) or individual capitals that puts them in their rightful place.

Financing for critical minerals exploration projects is still variable. At least for the moment there is a strong favouring of producers because there are scarcely any. This plays very well also for developers. Explorers are unlikely to get much official (or any) funding. However, in the interest of <u>resilience</u>, purse strings are loosening and projects in a somewhat random way are being benefitted as the bureaucrats cannot really tell the difference between the good, bad and the indifferent.

Thesis

Peace may come to the warring nations of the world (at the moment), but the illusions/delusions created by the "peace dividend" spoken of in the wake of the end of the Cold War have now proven to be a false premise. Militaries are rebuilding all around the world and metals like Tungsten, Antimony and Tin are high on their shopping lists. However, one may not realise this from lists of critical elements that look more like wish-lists for the receding energy transition and most particularly EVs.

The way the world is going the elites do not believe that the Great Unwashed need, or deserve, to have their own vehicles. Let them eat cake (or take public transport) is the cry of the 1%.

Recommended Reading:

Pitron, Guillaume - *The Rare Metals War: the dark side of clean energy and digital technologies*, published by Scribe Publications in January 2021 (paperback, 263 pages)

Chomón, Juan Manuel - *THE RARE EARTHS ERA: Strategic Metals Dependency & World Order*, © 2019 CLARITY PRESS

Appendix I: CM Hub

A Checklist for Action

Shaking the Shibboleths

With a lot of EU policy and thinking driven by *"kumbaya"* rather than logic it needs outsiders to call "enough", or indeed *"basta",* on the delusional goals of the so-called Circular Economy. We in our own way have critiqued this policy for a long while, but we noted recently a major contribution to the intellectual debate on this, and again it came from the outside the EU sphere/bubble, in the form of a paper titled *"The CRMA Has Officially Failed: Until Europe Builds a CAP for Mining, It's Just a Fancy Excuse for Not Mining"* authored by veteran mining fund manager and commentator, Amanda van Dyke, a Canadian based in London.

The full paper can be found here: https://amandavandyke.substack.com/p/the-crma-has-officially-failed-until

We have here excerpted her conclusion, a call to action which she documented in a seven-point checklist:

1. A sovereign capital stack for critical minerals

Strategic status must come with money.

Europe needs an EU-level financing mechanism that can take equity, provide long-tenor debt, underwrite offtake and share first-loss risk for critical-minerals projects. It can sit within existing institutions, but it must be ring-fenced, mandate-driven and politically protected.

If a project is designated strategic under the CRMA, there should be a clear pathway into this capital stack – not a vague suggestion that the EIB might be more "favourable".

Targets without capital are theatre.

2. Binding permitting with an override

"27 months" must cease to be a polite aspiration.

Strategic projects should be placed on a special track where:

- Agencies have hard statutory deadlines.
- Failure to decide triggers automatic escalation to the national government and then, if necessary, to an EU-level body.

In extremis, the EU has the ability to designate certain projects as essential infrastructure whose approval cannot be vetoed by local politics if basic standards are met.

This is not about bulldozing communities. It is about recognising that local opposition cannot carry infinite weight in decisions about continental resilience.

3. Fiscal terms that actually attract capital

You cannot combine:

- Higher labour and energy costs.
- Higher regulatory compliance costs.
- Unstable or punitive tax regimes.

…and expect to become a competitive jurisdiction for mining and processing.

A CAP for mining would include:

- Tax credits or allowances for investments in CRMA-listed projects
- Accelerated depreciation for critical-minerals assets
- Energy-cost relief for strategic processing facilities
- Royalty and tax stabilisation agreements that last the life of the project

Mining does not need subsidies forever. It needs predictable, bankable terms that recognise the realities of the cost base.

4. A rational carbon border regime for materials

The Carbon Border Adjustment Mechanism (CBAM) was designed with climate integrity in mind, not materials policy. In practice, it adds compliance and cost to imports while doing little to reward domestic mining and refining of critical minerals.

If Europe wants to decarbonise and reshore simultaneously, it needs to stop treating energy-intensive materials production as a climate embarrassment.

That means either:

- Exempting CRMA-strategic materials and processing from certain CBAM burdens, or
- Redesigning the system so that on-shore production of critical minerals is clearly advantaged over imports produced under laxer regimes

You cannot declare materials strategic and then price their domestic production out of existence in the name of climate virtue.

5. Materials literacy as a public responsibility

It is not sustainable for every mining company to fight the same battle, town by town, explaining that "yes, your EV, your MRI, your smartphone, your wind turbine and your grid actually require mines and refineries."

Governments need to own that conversation.

A CAP for mining would fund:

- Education programs that make the link between daily life, the energy transition and primary materials explicit
- Public-information campaigns that normalise mining as a legitimate, regulated heavy industry – not a moral stain
- Civic curricula that treat materials literacy as basic knowledge, on par with energy literacy

If citizens understand that refusing all mines while demanding more metals is simply outsourcing impacts to other countries, the political space for rational trade-offs widens.

6. Hard-wiring critical minerals into trade and investment treaties

The era of meaningless memoranda of understanding has to end.

Europe should be negotiating trade and investment frameworks that:

- Embed critical minerals as explicit pillars
- Provide investor protection and dispute-resolution mechanisms for long-cycle mining projects
- Tie access to EU markets to reciprocal openness for EU capital in upstream and midstream assets
- Coordinate with EU-backed financing tools to de-risk strategic projects abroad

This is what serious countries are already doing. The CRMA as currently structured mostly sits on the sidelines of this game.

7. Zoning, protections and income support for mining regions

Finally, a CAP for mining would accept that some European regions will be mining regions and treat them accordingly.

That means:

- Zoning and land-use rules that create presumptive corridors and zones for mining and processing, with clear guardrails but also clear expectations
- Regional development and income-support mechanisms for communities hosting strategic projects, so that benefits are visible and durable

Appendix II: Antimony

What Goes Up….

Far From Novel

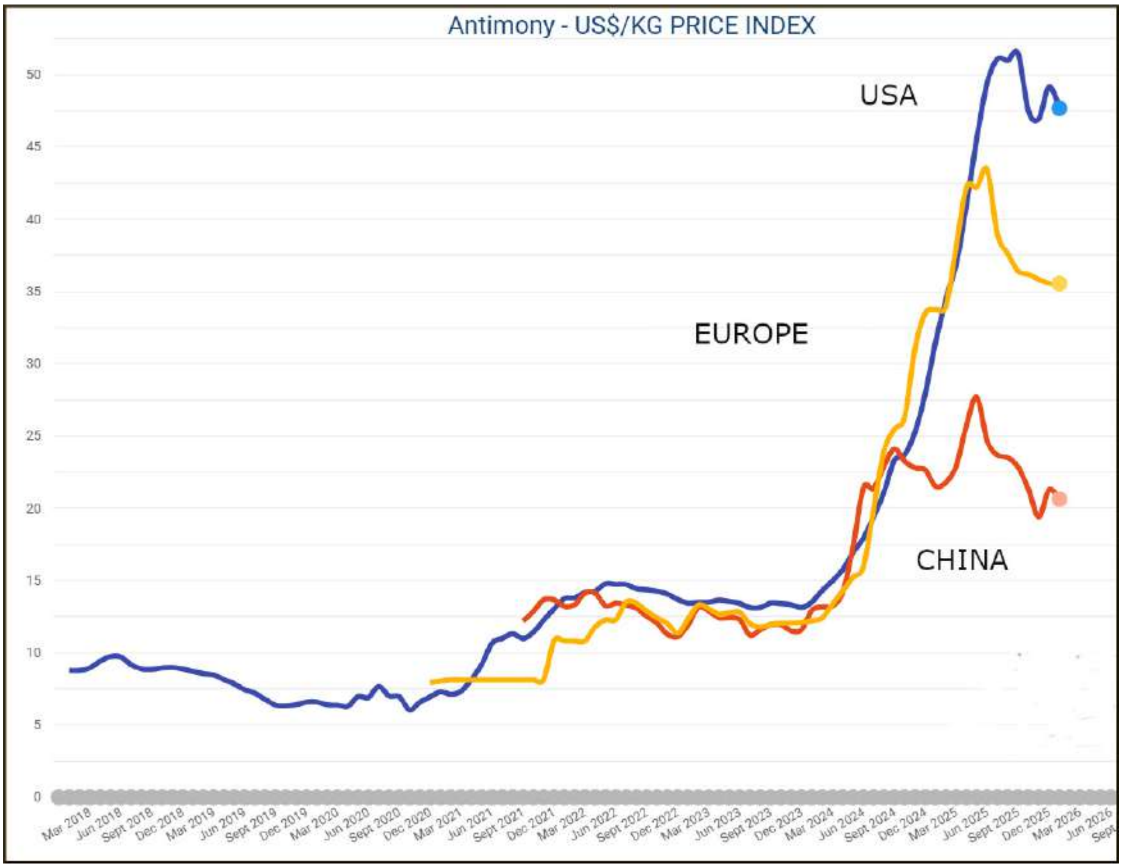
A little history would be pertinent at this point. We have seen a far-fetched claim that Antimony has been a military metal "since ancient times" and this is patently ridiculous. The element was employed for millennia in glass production, makeup and in some medicinal potions. If its main military application is in bullets then how can it have been used in Europe before gunpowder arrived from China in the Renaissance? The reality is that it began to used as an alloy to harden lead in bullets/shot from the 16th or 17th centuries. After that time its demand and price fluctuated with wars and conflict.

Antimony Arrives in the Sunny Uplands

Historically, Antimony demand and price only really came into the spotlight during war time, WW1, WW2 and the Korean War. The Vietnam War did not have much noticeable effect. After 30 years of price suppression (read predatory pricing) by the Chinese from the early 1980s the price was unleashed by the Chinese in 2013 producing a dramatic spike, and then the inevitable plunge. Long term industrial users, particularly in the fire-retardant industry (a sector that had evolved since the 1960s) went into a state of shock & awe and furiously thrifted the percentage of Antimony Trioxide (SbO_3) that they employed in their products, demand fell, and the price of Antimony plunged from over $14,000 per tonne back to under $6,000. There it malingered until the start of the pandemic when it bounced back to around $13,000.

The factors that juiced up the price were twofold. The Chinese had long maintained their position (and a stiff upper lip), despite falling internal mine production, by propping up their processing dominance by harvesting product from artisanal miners in the Global South. Then the concurrence of concerns about Chinese dominance of this key military metal combined with the wars in the Ukraine and Gaza and the Western rearmament putsch to create a perfect storm. The Chinese poured gasoline on the fire by declaring the element to be dual use (following its declarations of the same in Tungsten, Gallium and Germanium) prompting what was effectively an export ban and the rest is history. The price of Antimony soared, topping US$60,000 per tonne but has now, according to our sources in the price reporting industry, tumbled down to $20,000 per tonne.

This may however have risen since the outbreak of the current war in the Middle East.



Source: businessanalytiq.com

Europe as Fertile Territory

As noted earlier, the Chinese sunk the international price in the mid-1980s to gain dominance. With that action they achieved a *Grand Slam* across the global antimony space taking out virtually every mine outside China (except Consolidated Murchison – with its gold component - in South Africa and those in the Soviet Bloc, which were concentrated in Slovakia). The mines across Western nations closed down, particularly those in long-established substantial producers such as Spain, France and Italy.

One mine in Spain had been the largest in Europe (yet ironically was managed by Consolidated Murchison of South Africa), but Slovakia was the largest tonnage producer in Europe due to having a number of mines.

The mines in Slovakia struggled on until the early 1990s within the economic cocoon of Comecon but then also succumbed when the Iron Curtain fell and Comecon (and the Warsaw Pact) disbanded leaving the mines (such as Dubrava and Pezinok) without subsidies or rationale.

Other production had occurred in Serbia/Kosovo during WW2 and under the Yugoslavian regime.
Other regions of the world did not matter. North America was largely unendowed with Sb, while Africa. Latin America and Southeast Asia were only artisanal sources. Australia had on and off production more linked to gold content than Antimony.

Thus, it is fair to say that Europe until the 1980s was the second most important Antimony "region" after China.

Gone (and Forgotten)

Then it is important to note that the long-lived nature of Antimony mines would indicate that the mines that closed were NOT exhausted, but rather priced out of existence. In the $2-3,000 per tonne price range that reigned for decades, no producer without State support could survive. The end of the Cold War also resulted in the first instance to no new additions to reserves (whether in metal or armaments) and eventually to the running down or entire disposal of antimony reserves/stockpiles in the West.

Thus, it is a fallacy to see regard European countries as being without Antimony, rather they were without Antimony production. A brief attempt to promote Italy, and revive Spain, occurred around the time of the *First Antimony Recovery* in 2013-14 but these were squashed when prices fell back under $8,000 per tonne.

Regulatory Factors

It was only in late 2020 that Antimony was able to leave behind the FANYA market debacle that had lasted a few years. With the FANYA threat behind it, the new fear that replaced the overhang was a regulator threat, namely the EU and State of Massachusetts agitating against fire retardants. In the last two years this has gone back to being a sleeper issue (but could come back to life).

The EU's REACH investigations have not helped either with a witch hunt for toxic usages of the element that keep the International Antimony Association (I2A) constantly on the defensive.

Then, bizarrely there have been prohibitions upon use in ammunition for hunting. The UK government, for one, is banning lead shot, which is hardened with Antimony, though not banning Antimony itself. The ban will phase out both the sale and use of lead ammunition in England, Scotland, and Wales, with legislation planned for summer 2026 and a three-year transition period, making the ban fully effective around summer 2029. Exemptions will apply for military, police, elite athletes, and certain target shooting ranges.

Case Study I: Slovakia

The End of Ruritania

Brussels Runs Dry

It is useful to look at Slovakia as a case study as it is the European state that went from being highly mining oriented to being almost a mining desert in the shortest amount of time and now needs to pivot back towards mining as the EU gravy train has run into the buffers. The latter can be attributed to Brexit removing Britain's cross-subsidization of "newly"-acceded states combined with a refusal by other states such as Holland and Denmark, to up their already generous contributions to make p the shortfall.

It is notable that of long-established mining jurisdictions, it is the Scandinavian nations, plus Poland, where mining goes on and the Scandis have been net contributors, rather than takers, from the EU pot. Meanwhile it has been other nations that are net takers, and yet have strong mining history, such as Slovakia, that feel they can eschew mining and "live the dream". We are sorry to tell them that its "game over".

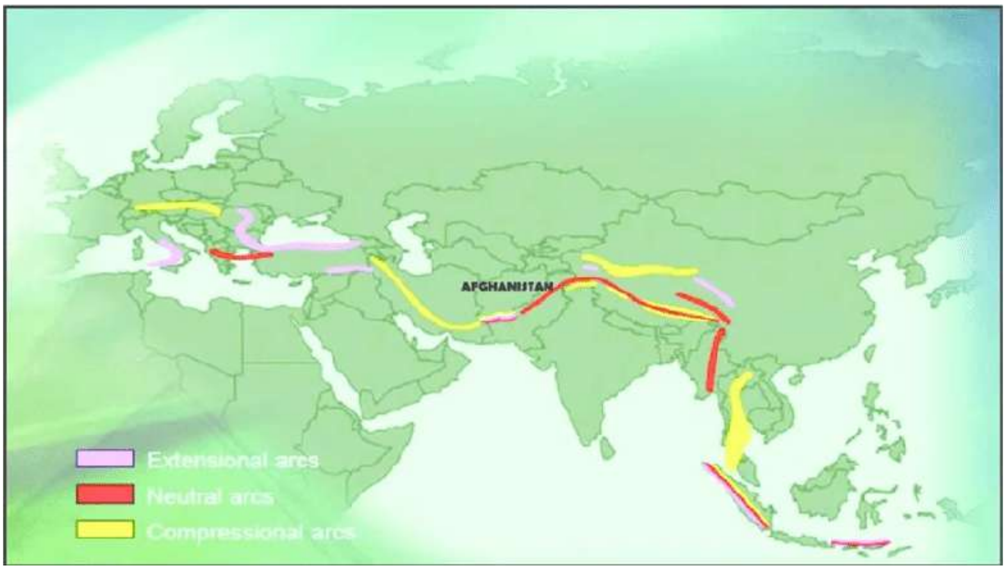
On Slovakia

Slovakia is steeped in mining history having been the epicentre of minerals extraction for half a millennium under the Austro-Hungarian empire, when the region was called Upper Hungary. A plethora of metals were extracted, chief amongst them being copper, gold, silver and Antimony. Under post-war Communist rule precious metals were a low priority and, in many cases, had been mined out. Copper has suffered a long term decline due to lower remaining identified resources and high extraction costs.

Geology, Geology, Geology

The western Tethyan, or Alpine-Balkan-Carpathian-Dinaride (ABCD) Province of the Balkans is part of the greater Tethyan (or Alpine-Himalayan) orogenic system that extends from Morocco in northwest Africa, through western Europe to southern and southeast Asia and resulted from the convergence and collision of the Indian, Arabian and African plates with Eurasia. This on-going collision was for the greater part initiated during the Cretaceous period.

The complex geometry of the collision interface and the presence of several microplates within the orogenic collage resulted in a variety of collision products, notably some segments characterised by extensive regional metamorphism and others by calc-alkaline igneous activity.



Source: Steinmuller

The peri-Eurasia Alpine branch in Central Europe is comprised of the arched western and the eastern Alps that are in line with the Carpathians and the Balkans (as shown on the map that follows). Further south, the peri-Adria branch comprises the Apennines, the Southern Alps and the Dinarides–Hellenides. The Carpathians form around the Pannonian basin an arch that is interpreted to result from post-orogenic extension in the back-arc regions of southward subduction zones.

Source: Jean Chorowicz

Antimony in Slovakia

Antimony, however, remained a major feature with the country ranking in the world's top five producers and being for most of the post war period, the largest producer in Europe. The country then Czechoslovakia was embedded within Comecon, the Eastern Bloc economic community, with coordinated economic and the military priorities of the over-arching Warsaw Pact. The Slovakian mines were designated as the preferred supplier of Antimony for both of these end-users. This protected the internal Antimony production from the ravages of Chinese competition, which had devastated Western Antimony production from the early 1980s onwards. However, the fall of the Berlin Wall resulted in the collapse of both the Warsaw Pact and Comecon, leaving Antimony mining in Slovakia as a loss-making activity in the face of the devastating opening to global (read Chinese) economic competition in this metal.

The few largest mines struggled on until the early 1990s and then succumbed. This was further compounded by the dissolution of Czechoslovakia into two states and the later accession of the two countries into the EU. Perversely this brought an avalanche of funds which made legacy industries, particularly those with less than ideal environmental histories (particularly with tailings storage and smelting) as expendable.

In recent years the EU gravy train has run out of sympathy for Visegrad Group states that have not used EU largesse to reorientate their economies to efficient or rising industries. To some extent the switch to populist governments in the Eastern side of the EU is due to this tightening of cashflows and the lack of employment opportunities in stagnant economies (except in Poland and to Czechia).

Until very recently Slovakia lived in a feel-good bubble that prioritized environmental concerns over economic growth. The country´s stagnation was ameliorated by export of the unemployed to the Western countries in the EU. This reached its peak in recent years when the country's then President (2019-2024), Zuzana Čaputová, was perceived to be excessively focused on green issues, to the detriment of economic growth. She was perceived to be close to the environmental movement, including Greenpeace, where her former partner Juraj Rizman served as the director of Greenpeace in Slovakia. Čaputová was known for her activism, particularly her successful legal and grassroots campaign against a toxic landfill near her hometown, for which she was awarded the Goldman Environmental Prize. She made mileage from her meetings with environmental organizations, including Greenpeace Slovakia, to discuss climate change as a national priority during her presidency.

She resolved to stand aside in the 2024 Slovak presidential election.

Then, Peter Pellegrini, in the first round of voting of the 2024 presidential election, finished second behind Ivan Korčok. However, Pellegrini went on to defeat Korčok in the second round held on 6 April, with 53% of the vote and was inaugurated as the sixth president of Slovakia on 15 June 2024. He had previously been Prime Speaker and the Speaker of the Parliament representing his party, Voice – Social Democracy, in coalition with Direction – Social Democracy.

The End of Ruritania

Robert Fico, a populist multi-millionaire, has been the prime minister of Slovakia since 2023. He previously served as prime minister from 2006 to 2010 and from 2012 to 2018. He founded the left-wing political party Direction-Social Democracy in 1999 and has led the party since.

Despite being Left-wing he also has a swathe of attributes/policies that are closer to the Right populists, which are in the ascendent in Eastern Europe. His re-election as Prime Minister upset the No-Growth consensus. The torpidity of the Slovak economy can in some ways be linked to the cause & effect of Brexit, with the pressure valve of exporting unemployed to the UK being removed and the tighter EU budgets caused by UK contributions terminating and the likes of the Dutch and Danes pushing back against endless funding of lagging Eastern members.

As noted earlier, tougher funding conditions have forced Eastern European members of the EU to face the reality that the gravy train they have travelled on since accession to the EU has now run out of steam. They need to have more to export than just citizens. That brings the issue of mining as a revenue, job and export generator back into contention after long decades of neglect.

Case Study II: Military Metals

Antimony Within Easy Reach

- + Military Metals appeared on the scene in 2024 having secured a well-positioned portfolio of Antimony assets in Slovakia, all of which we have visited in recent years
- + Trojárová is one of only two sizeable Antimony resources within the EU and is the only project we know of in Europe that is moving forward
- + There is exceptional infrastructure at this underground mine with extensive drives already reaching the mineralized areas of the historic resource
- + The recent drilling campaign confirmed the historical resource and laid the ground for an imminent updated resource
- + The mine at Trojárová was originally developed for gold so with prices for the yellow metal hovering at record levels, the by-product credits should be sizeable
- + The announcement of the appointment of the former head of Glencore in Germany was a major "catch" for the company's team in Europe
- + A new resource estimate on Trojárová is imminent, driven by recent confirmation drilling and metal price revisions
- × Permitting has still not been applied for, nor obtained

Positioning to Supply Europe

Since the early 1990s European end users of this strategic element have been entirely dependent upon imports, principally from China, for their needs. As noted earlier, this was a relatively comfortable position for a long while (until around 2012-13) when suddenly the supply situation, and the price, from China changed dramatically. Then in 2023-24, the Chinese introduced their dual-use export ban which left the European arms industry, in particular, without any source of supply.

To address this issue, Military Metals (CSE: MILI | OTCQB: MILIF | FSE: QN90) has been ramping up its efforts to move the Trojárová project into centre stage in the renaissance of mining in the EU. To that end MILI hopes to have Trojárová added to future iterations of the EU's project list. More detail on this is available in our Initiation of Coverage here.

The Slovakia Deal

In the nearly two years since Military Metals listed (via an RTO) in 2024, it has accumulated a portfolio of development assets in the Antimony space. Chief amongst the package of Slovakian assets, in addition to Trojárová, the company acquired the Tienesgrund Antimony Project in Eastern Slovakia, which holds a

10 km-long fault-hosted vein system.

Trojarova had been extensively developed in the 1990s by some German investors with a view to producing gold and has a historical resource dating from that period. The company has recently undertaken confirmation drilling at site.

The Asset

The Trojárová Antimony Project, located in Western Slovakia, some 15 km north of Bratislava. The project area has been extensively explored, with Soviet-era data indicating substantial Antimony and gold historical resources. The Trojarova license area covers the historic resource and numerous historic mining works in the ore-district.

Steeped in History

The earliest record of Antimony mining in the area dates back to 1790. In 1810, records documented production of 11.1 tonnes of stibnite. Antimony and pyrite were actively mined throughout much of the 1800's, with Antimony mined at Pezinok and Pernek-Krížnica and pyrite was mined at Ferdinand Karolína, Hrubá dolina-Ryhová, and Augustín. In 1848, a sulfuric acid plant was built in Pezinok and operated until 1896 when the mining of pyrite was suspended.

Active Antimony mining was renewed in 1906 when the first flotation plant in the Austro-Hungarian empire was built at Pezinok, one of the main historical Antimony mines in Slovakia and one of the more historically important Antimony mines in Europe as a whole. It is located roughly 5km southeast of the center of the Trojárová exploration area (TEA). We visited the Pezinok site early this decade.

Mining at Pezinok continued throughout World War I during which time it supplied Antimony for the manufacture of ordnance such as bullets and artillery shells, but production ended shortly after the war ended. A more modern mining and processing operation began in 1940 after the onset of World War II, when demand for Antimony as a "war metal" was high.

Having been occupied by the Nazis, a German company – Antimon-Aktien-Gesellschaft built a new mine with a rail line to the mill. Idle between 1947-1951, production at Pezinok resumed until 1991, when the combination of metal prices, the breakup of the Soviet Union and the transition in Czechoslovakia from a Communist to western economy led to the mine's closure. However, the deposit remains incompletely exhausted and there are private Slovak companies with active exploration and mining licenses over this historic deposit.

Exploration - Enter the Germans (Again)

Drilling from surface along with underground development work was initiated soon after. A total of 63 holes were drilled during this period along a 22-line grid for a total of 14,330m, and based upon the results of this drill program underground development at Trojárová began in 1990 comprising a portal and 300 meter-long adit connected to a 700-plus meter-long drive in the footwall of the mineralized zone with seven crosscuts into the mineralized zone for sampling purposes. Geological mapping and sampling was completed throughout the entire length of the underground workings.

Work, following the collapse of the Soviet Union and Comecon’s constituent states, was initially financed by the State. Then investment in Trojárová was taken over by a Cologne-based German real estate company, LUX Immobilien Köln.

Between 1983-1995, numerous studies were completed at Trojárová including petrographic, metallurgical and mineral resource estimates (MREs), some focused on Antimony and others on gold.

Around 1.7 km of underground work had been completed by 1995, when a lack of funding led to the termination of development work at the property, even though the adit had yet to reach the northwestern extent of where drilling had intersected mineralization.

The German investor did not fulfil his financial obligations at an advanced stage of the underground construction and the project was halted. Therefore, the adit (shown below) had not yet reached the part of the deposit with the high-grade ore.

And there exists a Lidar survey for the Trojárová claim. Otherwise, no work has been undertaken on the TEA since 1995 until 2025, when MILI launched a campaign of confirmation and step-out drilling at the site.

Latest Work

Work was undertaken from late 2025 into early 2026 at site. The drilling campaign was designed to confirm historical drilling results and to support SLR Consulting's (SLR) work towards establishing a current mineral resource estimate on the project. The final results were published in early March of 2026.

Of the seven holes completed in the latest campaign, five returned significant intercepts of antimony and four returned significant intercepts of gold. Holes 25-TVA-004, and 25-TVA-007 failed to return significant antimony intercepts and holes 25-TVA-005, 25-TVA-006, and 25-TVA-007 failed to return significant gold intercepts.

Interestingly the company defined "high-grade" as analytical results exceeding 5% Antimony, whereas we have seen some North American projects describing 1% as high-grade in an outburst of promotorial hyperbole.

Historical Resources

Several historical resources have been calculated using the Soviet-style classification of mineral deposits:

The first was in 1989 based on initial drilling program, where they defined blocks of 1.665 million tonnes @ 2.77 % Sb & 0.81 g/t Au.

Trojarova - Historical Antimony Resource

		Grade				Contained Metal				
Block No:	Tonnage	Sb%	As%	Au (ppm)	S%	Sb (t)	As (t)	Au (kgs)	Au (ozs)	S (t)
3-III-P1	345,319	5.902	0.226	0.826	5.48	20,380	780	285	8,906	18,923
4-III-P1	154,721	3.800	0.163	0.23	3.42	5,879	251	35	1,094	5,292
4b-III-P1	20,045	4.800	0.63	0.87	6.45	962	126	17	531	1,292
14-III-P1	41,334	13.250	0.96	2.47	6.17	5,476	396	102	3,188	2,550
14a-III-P1	20,839	9.005	4.55	2.936	6.085	1,876	948	61	1,906	1,268
14b-III-P1	18,067	3.360	2.057	1.234	3.463	607	371	22	688	625
27-III-P1	163,974	5.300	0.227	0.172	4.725	8,689	372	28	875	7,747
28-III-P1	66,755	4.550	1.32	0.15	4.64	3,037	881	10	313	3,097
	831,054	5.645	0.497	0.676	4.909	**46,906**	4,125	**560**	17,500	40,794

The second resource was calculated in 1992 based on previous results and infill drilling: 0.831 million tonnes @ 5.645 % Sb & 0.676 g/t Au.

The most recent MRE dates from 1995 reflected the data obtained from underground exploration utilising the Trojárová adit. Exploration was prematurely terminated before drill-verified rich ore was accessed and therefore the reserve estimate is more pessimistic: 0.415 million tons @ 0.162 % Sb and 1.148 g/t Au. The exploration project was also primarily aimed at measuring Au-As ore rather than Sb-rich ore.

Plugging into the Trading Elite

In recent days, the company announced the appointment of Thomas Hüser as Chairman of the Board, adding a heavyweight to the board with broad connections in German and European industrial circles.

He has had a career spanning the metals industry, industrial restructuring and public policy. He previously served as Managing Director of the German entities of Glencore, where he oversaw major zinc and lead production operations and led initiatives to modernize and transform large metallurgical facilities in Europe. He also served as President and CEO of the French listed metals group Recylex, where he managed a complex restructuring and asset transaction process involving multiple industrial sites. During his tenure as Managing Director of Glencore Nordenham, he successfully secured more than €500mn in public support, combining climate protection contracts with the industrial electricity price package.

Earlier in his career, he was an advisor to former German Vice Chancellor and Minister for Economic Affairs, Sigmar Gabriel, covering European industrial policy, energy strategy and government relations.

Meeting the Locals on Common Ground

It should be noted that mining *per se* is not disliked by the former mining regions, but that certain aspects are hot button issues. The experience of the AIM-listed Ortac PLC (with a gold project) early last decade is illustrative. There, the bugbears of local activists were:

- Open pit mining
- Cyanide leaching
- Tailings storage facilities

With Trojárová being an underground mine, the possibility of sending material elsewhere (e.g. Turkey) for roasting and the possible use of paste backfill for tailings disposal, all of those issues are ameliorated.

Risks

There are a number of potential risks that should be taken into consideration:

- ✘ That the Antimony price goes into reverse
- ✘ An outbreak of peace
- ✘ Regulator action (by Brussels) against Antimony on health grounds
- ✘ Environmental (or NIMBY) issues at Trojárová/Pezinok
- ✘ Financing difficulties for development projects

The long-awaited correction has occurred in the Antimony price taking it from around $60,000 per tonne down to $20,000 per tonne on the eve of the current Gulf War. This was entirely to be expected and we had warned of the likelihood. The fire retardant end-users were particularly suffering and there was also a widespread suspicion of “leakage” of product out of China. Despite virtually no Antimony appearing to be involved in the Mideast hostilities so far one cannot see a rationale for it rising in tandem with the war but rise it probably shall. We would not be surprised to hear that it is nearing $30,000 per tonne again but the market is totally opaque. In any case, at $20,000 the price is enormously lucrative (except for those projects with derisory grades, while $30,000 is bonanza territory.

Health issues related to Antimony’s use in some products are fallacious but nevertheless appear. The EU was on the verge of banning its uses in fire retardants in certain types of textiles but then pulled back when it was found to not have an acceptable alternative. The same type of ban was mooted in the US (e.g. Massachusetts) with the same eventual onset of reality.

As noted earlier, the environmental issues that Ortac fell afoul of can be ameliorated substantially by underground mining, minimal tailings disposal at site and no cyanide leaching. One issue that does not go away is that Pezinok, at a mere 15 kms distance from Bratislava, is a satellite town/distant suburb. Pezinok is also the country’s premier wine growing location (for white wines) that are highly prized/priced. The old Pezinok mine, some hundreds of metres downslope from Trojárová suffers from acid mine drainage issues, which we evidenced upon visiting. This issue would need to be the subject of assurances to head off the potential of NIMBYism forces coming into play.

While there is no extant PEA on the Trojárová project we would note that all the mine infrastructure is in place and modern and moreover, engineered to German standards. The mine will need a processing plant and no sign of how this might be done has yet been indicated. We would note however that the Pezinok complex is just down the hill and appears to be in good condition (we visited it in 2022) for the creation of a concentration plant. It appeared to be occupied by squatters at the time. (Re)utililising the historic works would minimize permitting complications. In our humble opinion the CapEx should not be more than US$10mn and could be significantly less.

Investment Thesis

With extensive, massive underground infrastructure in place at the “mine” at Trojárová. The project is more *plug & play* than virtually any other Antimony project under development, except maybe the Hillgrove Mine of Larvotto (ASX: LRV) in Australia. This minimizes CapEx while the company would be seeking approvals for (re)opening a mine that is largely extant. This is always less problematic.

The only issue to address would be processing into a concentrate (usually crush/grind/float with Sb), that could be then barged down the Danube to Turkey for roasting or trucked to some location within the EU (most probably Belgium or Holland). That would ameliorate any local fears about pollution from processing operations.

Trojárová is one of the few Antimony projects with a super-short timeline from firing the starting gun until first output. It should also be noted that Trojárová (like the Costerfield and Hillgrove mines) is an Antimony-Gold deposit and thus could be, potentially, firing on both cylinders of metals in high-priced demand.

However, an acquirer wanting to position themselves in the Antimony space in Europe might pay up substantially for control of MILI and its asset base.

We have afforded Military Metals a **LONG** rating with a 12-month target price of CAD$1.18. This will be revised with the publication of the upcoming MRE and the company signalling its next steps.


Historic Chart for Cdn:MILI by Stockwatch.com 604.687.1500 - (c) 2026
Thu Mar 26 2026 Op=0.48 Hi=0.50 Lo=0.475 Cl=0.48 Vol=272,110 Year hi=0.69 lo=0.31
Cdn:MILI
0.68
0.66
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0.42
0.40
0.38
0.36
0.34
0.32
Volume
4.5 M
3.0 M
1.5 M
Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar
2025
2026

Important disclosures

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