

Rearming Europe: The Battle for Critical Defence Metals



Lessons in Self-Defence

On March 4, 2025, the European Union announced the ReArm Europe plan, a €800 billion initiative designed to strengthen European security and provide immediate support to Ukraine. The plan is built around three key measures:

- Boosting National Defence Spending – EU Member States can now increase defence budgets without triggering the Excessive Deficit Procedure. A 1.5% GDP increase in defence spending could generate €650 billion in fiscal space over four years.
- New Defence Investment Instrument – A €150 billion loan program will help Member States acquire critical military assets, including missile defence systems, artillery, drones, cyber security measures, and military mobility upgrades.
- Leveraging the EU Budget – The EU will allocate additional short-term funding for defence-related investments.

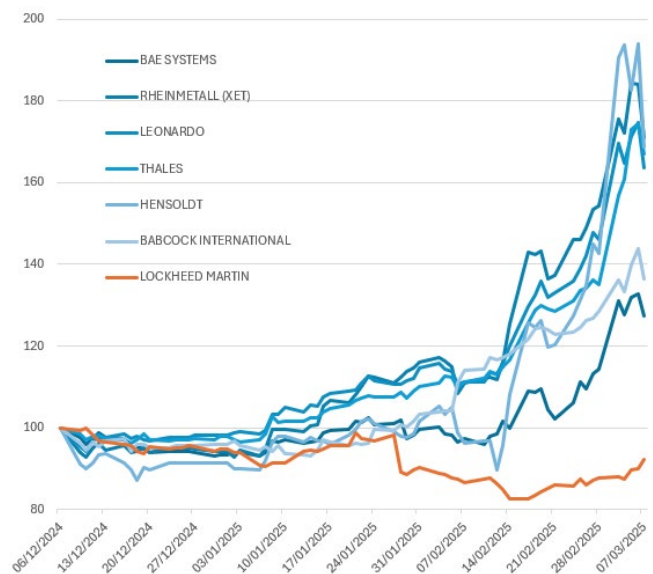
Markets React: European & UK Defence Stocks Surge, Lockheed lags

European and UK-listed defence and aerospace stocks continued their upward momentum following the announcement – the push for increased defence spending has intensified under President Trump, who has repeatedly called for Europe to take greater responsibility for its own defence.

Since the start of the year, London-listed BAE Systems and Babcock International have risen around 35%, while European defence stocks are almost 70% higher. US giant, Lockheed Martin, in contrast, is around 8% lower over the same period. The divergence likely reflects the fact that new kit will be centred on supplies outside the US as Europe looks to reduce its dependence on US weaponry, which require US spare parts and software updates.

To put the targeted €800 billion, ReArm plan into perspective, the combined annual revenue of the six European defence giants totalled \$94 billion (LTM), which compares to just over \$70 billion for Lockheed Martin, the world's largest defence contractor.

Chart: Aerospace & Defence Stocks price rebased



Source: LSEG Datastream

Critical Defence Metals: Securing Europe's Supply Chains

With the rise of friendshoring – where like-minded nations prioritize trade among allies – alongside heightened geopolitical risks and shifting trade alliances, securing the raw materials for Europe's military manufacturing boom has taken on new urgency.

Can Europe rely on Russia for its future nickel, platinum group metals, and vanadium needs or on China for its rare earth elements and tungsten?

Europe's defence sector depends on a complex mix of metals and alloys, which can be grouped into four key functional categories:

1. Armor & Structural Materials

The backbone of tanks, armoured vehicles, naval ships, and aircraft frames, these materials include steel, titanium, and aluminium, reinforced by nickel-based superalloys like Inconel (nickel-chromium) and Maraging Steel (nickel-cobalt-



molybdenum-titanium), which provide high strength, durability, and reduced weight for modern military hardware.

2. Ammunition & Ballistics

From Armor-piercing rounds and artillery shells to missile warheads, metals like tungsten, copper, and lead, alongside cobalt-based superalloys such as Stellite (cobalt-chromium-tungsten), ensure high-density impact, penetration power, and heat resistance for next-generation weaponry.

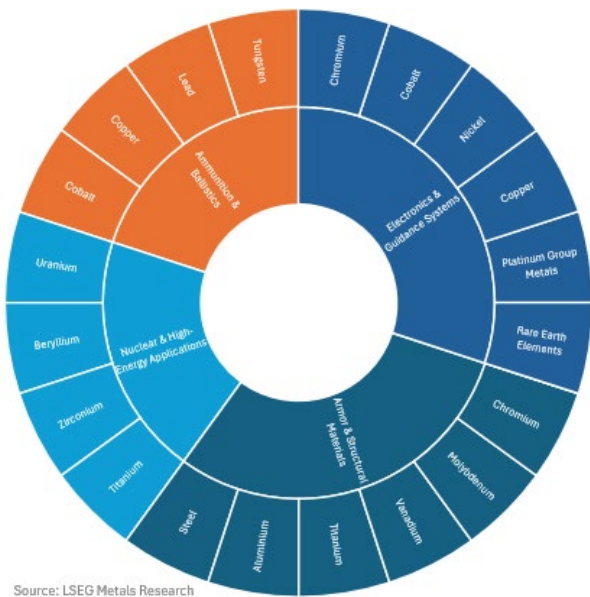
3. Electronics & Guidance Systems

Vital to radar, avionics, targeting systems, and missile guidance, critical materials like rare earth elements, platinum group metals, and high-performance alloys such as cobalt, nickel, and Hastelloy (nickel-molybdenum-tungsten) provide heat resistance, magnetic shielding, and electronic conductivity for cutting-edge military technologies.

4. Nuclear & High-Energy Applications

Essential for nuclear-powered submarines, reactors, and specialized weaponry, elements like uranium, beryllium, and zirconium, combined with superalloys like Haynes 230 (nickel-chromium-cobalt-molybdenum) and Incoloy (nickel-iron-chromium-molybdenum), deliver radiation resistance and structural integrity under extreme conditions.

Chart: Critical Defence Metals by Function



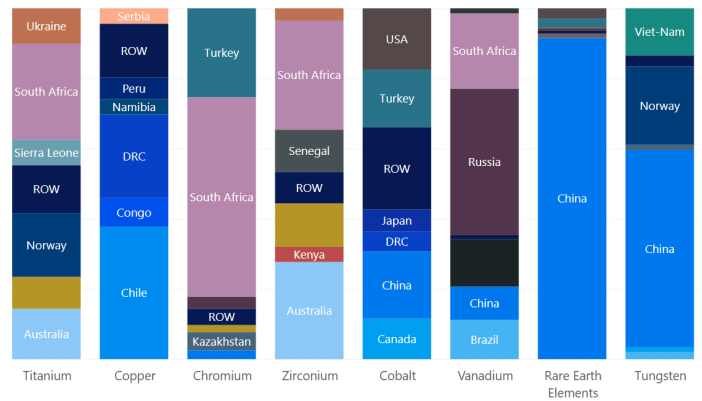
Source: LSEG Metals Research

Trade: Europe's Reliance on Foreign Metals

Europe is not a major metals and minerals producer, making it highly dependent on foreign states for the raw materials needed to sustain its military-industrial complex. The bar charts below illustrate key trading partners for critical defence metals, using trade data (2024) from EU member states and non-EU partners.

Some of the obvious risks with regards to trade partners and/or concentration of supply include Vanadium (China, Russia), Chromium, Titanium and Zirconium (South Africa, Mozambique and Sierra Leone), Tungsten (China, Vietnam), Cobalt (DRC and China), Copper (DRC), Platinum Group Metals (South Africa) and lastly, Rare Earth Elements (China).

Chart: EU imports from ROW, Jan-Dec 2024



Source: LSEG, Global Trade Tracker

Raw Material Sourcing Risks: The Growing Geopolitical Challenge

Europe faces significant sourcing risks for critical raw materials, particularly from Russia, China, and Africa. And while Europe has historically maintained strong FDI flows into Africa, China's influence also spans the continent. China invested heavily in both infrastructure and resource extraction post the Global Financial Crisis in 2008, however, its lending has reduced substantially since 2019. Meanwhile, Russia has strengthened its presence in Africa, primarily through military partnerships and strategic engagements, positioning itself as a counterbalance to Western influence. This was evident in February 2023, when South Africa hosted the Russian frigate 'Admiral Gorshkov' as part of joint naval exercises.

Beyond South Africa, political risks are rising across other key resource regions and trading partners. In the DRC, the M23 rebel conflict, reportedly backed by Rwanda, has escalated tensions in the mineral-rich eastern provinces, particularly North Kivu and South Kivu. These areas hold vast reserves of coltan (for tantalum), cassiterite (tin ore), gold, copper, and cobalt. Further south, Mozambique's disputed October 2024 elections triggered significant unrest, and in December 2024, Syrah Resources, an Australian company operating the Balama graphite mine, declared force majeure.

Conclusion: Can Europe Reduce Its Supply Chain Risks?

With the Critical Raw Materials Act (CRMA), the EU has set ambitious targets to enhance self-sufficiency in critical raw materials by 2030. Efforts to rebuild domestic capacity are already emerging.

In September 2022, Solvay announced plans to expand and modernize its La Rochelle facility in France, aiming to meet up to 30% of Europe's demand for rare earth permanent magnets by 2030. Four decades ago, La Rochelle was home to one of the world's largest, rare earth processing plants—its revival signals a strategic shift, but it's only the first step. Major challenges remain including, limited funding, public opposition to new mines and processing plants, and competition from lower-cost Chinese imports. Meeting these new targets is crucial, not only for

reducing import dependency, but also for achieving the EU's zero-carbon goals.

Europe still faces concentrated supply risks in key defence metals. To address these risks, it could:

1. Scale up domestic refining and processing capabilities
– La Rochelle is a start, but a broader supply chain strategy is needed.
2. Diversify sourcing in Africa and other strategic regions –
Reducing dependence on Russia and China.
3. Invest in sustainable mining and recycling technologies
– Balancing resource security with environmental concerns will be key to long-term resilience.

CONTACTS

Bruce Alway
Director, Metals Research

Email: bruce.alway@lseg.com

Visit lseg.com

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