



SUMMARY OF ANTIMONY DAY 2025

17-18 November - Brussels

Introduction

2025 marks a critical turning point for the global antimony industry.

China's halt on antimony exports has disrupted supply chains worldwide, creating major challenges for European industries. As a key component in flame retardants, energy storage, electronics, and defence, antimony is **essential for Europe's strategic autonomy and industrial resilience**.

To address these issues, the International Antimony Association hosted a high-level two-day event in **Brussels** during Critical Raw Materials Week (**17–18 November 2025**), bringing together over **130 stakeholders** daily. The discussions underscored the urgent need for recognition, investment, and coordinated action.

Day 1: Examined the **broader context of critical raw materials** in Europe's economic and geopolitical landscape, focusing on reducing dependencies and strengthening supply chains.

Day 2: Explored the **antimony value chain** through three pillars—**politics, markets, and technology**—covering global dynamics, the impact of China's export ban, market trends, and technological innovations shaping a resilient future.

Summary and key messages – Day 1

Opening: welcome and institutional remarks.

Opening the two-day conference, incoming **Board Member of the Critical Raw Materials Alliance, Katarzyna Palaczanis**, highlighted that critical raw materials are the backbone of Europe's Green Deal, digital ambitions, and industrial strength—without them, strategic technologies cannot expand. She emphasised that **securing and diversifying supply, increasing circularity, and supporting responsible production** are vital to transition from discussing resilience to actually building it. Lastly, she clarified that the CRM Alliance unites industry and policymakers to ensure Europe's long-term goals align

with current industrial realities and genuine strategic autonomy.

Raymond Devaux, President of the International Antimony Association, emphasised that we are witnessing the end of a globalisation cycle and are moving towards a paradigm centred on local and inward strategies. He stressed that this shift makes the **race for critical raw materials sovereignty even more urgent**. Furthermore, he highlighted that Europe's pursuit of energy independence is intrinsically linked to achieving CRM sovereignty.

Session #1 – Opening Keynote: Europe's Critical Raw Materials Act: What's Next?

The conference highlighted the crucial role of critical raw materials (CRMs) in Europe's industrial and geopolitical future. The European Commission presented legislative measures to boost CRM sovereignty, with **RESourceEU**—a new plan announced in October 2025—aimed at securing access and reducing reliance on external sources. A detailed proposal is expected within two weeks.

The Commission indicated a shift towards **refining and processing** rather than new mining projects. Speakers called for full industry engagement to ensure RESourceEU is ambitious, well-funded, and

not merely a rebranding of existing initiatives. Increased European defence expenditure could stimulate CRM investments. Connecting strategic sectors—automotive, semiconductors, clean tech—with the necessary raw materials will be vital.

CRMs were consistently described as **essential for mobility, electronics, defence, digital, and clean-tech industries**, as well as for **energy security**—now equated with economic security. Despite difficulties, participants agreed that Europe has significant strengths and must act confidently and assertively.

Session #2 – Spotlight Talk: Antimony, Lithium, Graphite – The Overlooked Enablers of Resilience

This session highlighted the vital yet often overlooked CRMs that underpin Europe's long-established industrial base—an ecosystem shaped over centuries, employing thousands and operating under some of the strongest environmental and social standards worldwide. Materials such as **antimony, lithium, graphite, gallium, and germanium** were emphasised as crucial enablers of this resilience.

A notable success story was sodium antimonate in glass manufacturing. Used as a clarifying agent, it removes irregularities, enhances quality, and strengthens glass. Given its importance in

solar panel production, sodium antimonate has gained strategic significance as Europe aims to reduce dependence on China in this sector.

Graphite was also emphasised as a widely utilised but increasingly vulnerable material due to foreign competition. Panel members called for heightened political awareness of such critical materials and urged policymakers to invest seriously in a coherent strategy for **European material sovereignty**—one that ensures access to these vital inputs for Europe's industrial future.

Session #3 – Round Table: Innovation & Circularity: From Primary to Secondary: Unlocking the Circular Potential

The roundtable highlighted ongoing challenges for **Europe's CRM sector**: high energy costs, limited processing capacity, slow permitting, and increasing global competition. Heavy reliance on non-EU suppliers weakens industrial independence, while the U.S. and Asia advance with integrated energy and industrial strategies. Europe's high-cost base and unpredictable policies hamper clean-tech manufacturing, delay investments, and threaten industrial relocation. The case of **Vianode**—a Norwegian firm investing in Canada due to lower energy prices and better conditions—illustrated the urgency.

Panellists called for Europe to become more attractive by:

- tackling energy costs;
- preparing consumers to pay a premium for EU-made products;
- reducing CAPEX through predictable policies;
- accelerating permitting.

Speakers warned about Europe's vulnerability to large-scale U.S. and Chinese industrial policies and its reliance on China for entire strategic value chains. Recommendations included:

- diversifying supply chains;
- expanding refining and processing capacity;
- promoting recycling and circularity;
- incentivising local content in strategic technologies.

On innovation and circularity, participants emphasised the need to align ambition with economic realities. Recycling can only expand with sustainable business models, yet global overcapacity, low CRM prices, and cheap imports hinder investment. Without strong incentives, recycling targets will not be achieved. Current technologies recover only some CRMs, highlighting the need for innovation and wider deployment to keep materials in the loop.

Summary and key messages – Day 2

Session #1 - Welcome and Institutional Remarks

The second day began with a clear message: **Europe recognises the strategic importance of critical raw materials (CRMs)** but struggles to close the **gap between ambition and implementation**. Despite strong policy frameworks, delivery remains slow. As Moderator David Rose noted, "The Chinese and Americans are scoring goals while Europe is still doing stretching exercises"—a reflection of regulatory complexity and sluggish processes.

Speakers emphasised that manufacturing, clean-tech, defence, digital, and mobility sectors rely heavily on CRMs. However, **high energy costs, limited processing capacity, lengthy permitting processes, and fragmented regulation** weaken competitiveness. Asian producers can establish 4–6 smelters in less than a year; in

Europe, it takes 4–5 years. The antimony sector illustrates these challenges.

Campine's case demonstrated how environmental assessments, planning reviews, and permitting delays render projects commercially unviable, while Asian producers expand within less than 12 months. Additional obstacles—strict emission limits, local opposition, and administrative unfamiliarity—further extend delays.

Despite this, solutions exist to **diversify supply chains, build global alliances, and unlock recycling and circularity through regulatory reform**. Market stabilisation and a return to normal pricing are also critical to rebuild the antimony value chain.

Session #2 - Beyond Tariffs and Tensions: Crafting Europe's Competitive Edge in a Divided World

The second session **examined Europe's growing competitiveness challenge through the lens of critical raw materials (CRMs)**. Antimony and other CRMs were highlighted as symbols of Europe's struggle for strategic autonomy in a geopolitically divided world.

A key theme was the gap between political commitments and implementation. Mario Draghi's Competitiveness Report lists over 300 measures, yet few have been executed. The new "Draghi Observatory" confirms systemic failure due to institutional resistance, competing agendas, and administrative inertia. Speakers urged greater industry **engagement to drive regulatory and ideological change**.

Urgency dominated the discussion. Under the Critical Raw Materials Act, Europe needs by 2030: 10 new mines, 50 processing plants, and 50 recycling facilities—yet none have been built after two years. Germany's rapid LNG terminal deployment showed

Europe can act fast when it sees a real crisis. Financing remains a major obstacle, as no dedicated CRM funding mechanism exists.

Regulation and permitting also hinder progress, with strategic projects delayed 4–6 years. Local veto power and environmental opposition—visible even during Raw Materials Week—compound the problem.

Recommendations included: banning battery scrap exports to Asia, enforcing green procurement with EU content rules, and adopting a fast-track "Mining, Processing & Recycling Accelerator Act" to cut permitting from years to weeks. Trade policy must become more assertive, and CRMs should be framed as a national security issue to promote a "Make in Europe, Buy in Europe" mindset. Finally, speakers called for dedicated **financing tools and a European strategic bank for non-ferrous metals**.

Session #3 - Invisible but Essential: Antimony's Role in Europe's Green and Sovereign Future

This session explored **antimony's technical importance, regulatory pressures, and parallels with the lithium value chain**. Though invisible to consumers, antimony is critical for meeting Europe's highest safety and performance standards.

Its **primary use is in brominated flame retardants**, where antimony trioxide works synergistically with bromine to deliver superior flame resistance in electronics, automotive parts, and insulation—often with no viable substitutes without compromising safety or durability.

However, regulatory uncertainty is growing. Recent ECHA decisions and REACH requirements demand extensive environmental, toxicity, and use-phase data, adding complexity and cost.

Antimony also offers strong **circular potential**, but innovation funding and slow approvals for intra-EU waste shipments hinder scaling.

The session also explored what the antimony sector can learn from Europe's lithium experience. Lessons from lithium show similar dynamics emerging in antimony. Europe must treat antimony as **strategically** as lithium, strengthen friendshoring with trusted partners (Chile, Canada, Australia), **and enforce local content** in procurement.

The session concluded with **calls for a coherent strategy**: improved risk management with regulators, stable pricing mechanisms, faster waste shipment approvals, and targeted public funding for recycling and refining.

Session #4 - Antimony and Power: How China's Export Controls Are Redrawing the Industrial Map

This session examined the **geopolitical transformation in global raw materials markets**. Speakers stressed that China's export controls on antimony and other CRMs are part of a long-term geoeconomic strategy to pull downstream manufacturing into China and maintain Europe's dependency—not short-term coercion.

The European Commission outlined a **three-tier response**:

1. Engage with Chinese authorities for predictable licensing and prevent weaponisation.
2. Explore legal challenges, including WTO action, with like-minded partners.
3. Keep countermeasures "on the table" if disruptions become unbearable.

Industrial implications are severe: EU manufacturers face import duties, price spikes, and competition from cheaper Chinese products, prompting debate over interventionist measures such as

price floors, off-take agreements, and mandatory sourcing rules. Trade policy is increasingly seen as industrial policy.

Europe faces a permanent shift toward geoeconomics, driven by the retreat of China and the U.S. from rules-based trade. **Coordinated trade, industrial, energy, and diplomatic policies** are needed, but internal divisions hinder common EU action. Stronger political pressure and deeper cooperation with partners will be essential.

Looking ahead, the Commission previewed ReSourceEU, expected in December, modelled on **REPowerEU**, to secure CRMs under the Critical Raw Materials Act—although no antimony-specific actions are yet planned.

The **key message**: Europe operates in a new strategic environment where materials, markets, and power are intertwined. Antimony exemplifies how geopolitics can rapidly impact industrial resilience and why Europe must adapt its trade and industrial tools.

Session #5 - Closing the loop: The future of Antimony Recycling in Europe's Industrial Strategy

This session examined the growing strategic importance of **antimony recycling for Europe's industrial resilience**. As antimony prices have risen eightfold since 2021, European dependence on imports has deepened. Europe is losing valuable secondary raw materials through regulatory, technological, and systemic barriers. The result is a circularity gap that undermines both sustainability objectives and industrial competitiveness.

Europe consumes approximately 40,000 tonnes of antimony each year in finished products, largely imported in metallic form before being transformed into flame-retardant additives, metallurgical compounds, and battery applications. Around half of this demand is concentrated in plastic additives, brominated flame-retardant systems, while roughly 30% goes into metallurgy. Yet at end-of-life, Europe captures only a fraction of this material. Waste streams represent a major untapped opportunity.

The session also focused on **DEEMines' innovative recycling technology**, which dissolves the polymer matrix at ambient temperature and pressure, allowing the simultaneous extraction of around 88% of both antimony and bromine. The process uses non-toxic reagents and enables the production of a reformed plastic free of flame-retardant additives.

One of the key takeaways from the session was that Europe's supply-chain resilience relies on establishing a **fully functioning circular economy for antimony**. Technologies to recover antimony, bromine, and plastics already exist or are emerging, but regulatory frameworks and funding mechanisms must evolve rapidly to enable industrial deployment.

Session #6 - Antimony in Innovation: Unlocking the Next Frontier in Materials and Technologies

This session examined how **market volatility, concentrated supply chains, and geopolitical pressures** are reshaping investment and innovation in antimony. Speakers stressed that antimony is becoming a strategic material, critical for defence, industrial resilience, and technological innovation.

Markets have faced unprecedented turbulence, with prices peaking before partial stabilisation. Volatility stems from fragile supply chains and geopolitics: China, Russia, and Tajikistan supply about 90% of global output. For decades, China kept prices artificially low, eroding Western mining and refining capacity. While new projects are emerging, most remain in high-risk jurisdictions. The shortage of deliverable metal drove recent price spikes, highlighting the need for investment across the value chain.

The U.S. is responding aggressively with stockpiling, long-term offtake contracts, and price floors, supported by rising defence

budgets. In contrast, Europe lags: CRMA targets remain distant, permitting delays persist, and social barriers are unresolved.

Defence accounts for only 10% of demand but plays a pivotal role. Antimony's use in munitions and advanced military technologies strengthens the national security case, accelerating public-private partnerships and investment—especially in midstream processing, the key bottleneck.

Speakers warned Europe must “catch up.” Without faster permitting, stronger incentives, and alignment between defence and raw materials strategies, Europe risks falling further behind. High risk does not mean no opportunity: market rebalancing is underway, Western governments are taking strategic control, and investors are ready—if policy frameworks reduce uncertainty.

Session #7 - Strategic Outlook: Antimony Market Update: Supply, Demand

This session emphasised that antimony is a **geopolitically sensitive commodity**, with supply constraints—not demand—driving market dynamics.

China's export controls remain the dominant force. Between January and July, metal exports fell 87% and antimony trioxide exports dropped 80%. Although some measures were temporarily eased, licensing still applies for the U.S. and Europe.

Market participants doubt significant flows, as China's long-term strategy prioritizes domestic value-added production over raw material exports. Structural issues add pressure: mines are depleting, concentrate supplies are tightening, and China now imports concentrates to meet its own needs.

Supply chains are shifting rapidly. Southeast Asia has become the main alternative processing hub, with eight new smelters in

Vietnam, Cambodia, and Laos adding ~600 tonnes/month. Yet most facilities rely on Chinese technology and personnel, making the region an extension of China's strategy. Myanmar remains the key feedstock source, but political instability poses major risks. Europe's processors—Campine, AMG, Umicore—could scale up if feedstock access improves, but diversification beyond Myanmar and Russia is critical.

Market transparency remains weak. The session called for better **data visibility, stronger governance standards, and new financial instruments** to manage risk.

Conclusion: **There is no “easy win.”** Europe faces a structurally tighter market shaped by Chinese strategy, Southeast Asian intermediaries, geopolitical risks, and persistent uncertainty.

Session #8 – Wrap up

In his concluding address, **Raymond Devaux, President of the International Antimony Association**, outlined the central messages emerging from two days of discussions. He stressed that **antimony is not only “critical” but essential** to the functioning of modern life. From smartphones and satellites to batteries, flame-retardant applications, and defence technologies, antimony remains foundational to Europe's industrial and strategic capabilities.

China's dominance across the entire antimony value chain, including its refining capacity, has created deep vulnerabilities for Europe and the U.S. Although the global market is small (150,000–180,000 tonnes per year), **the strategic stakes are very high**. The industry now faces profound shifts in global supply. While the U.S. remains heavily dependent on Chinese antimony oxide, Southeast Asia has rapidly expanded smelting capacity across Vietnam, Laos, Thailand, Malaysia, and Cambodia, around 20,000 tonnes per year built within eight months. However, these plants face quality and feedstock constraints and cannot yet operate at full capacity.

Meanwhile, Europe's demand has fallen by approximately 25-30%.

Devaux also **described emerging market distortions and unfair competition**. Without **tariff protection and stronger customs enforcement**, European producers face structural disadvantages that threaten long-term viability.

Looking ahead, Devaux called for a **coordinated resilience strategy at the European level**. Europe must diversify supply toward politically reliable partners, reinvest in domestic antimony metal processing and scale up circularity efforts. Closer cooperation among European processors, smelters, and recyclers, together with more structured industry frameworks, tariff measures, stronger enforcement of REACH Regulation and customs rules, and improved market governance, will be essential to safeguard competitiveness and maintain a level playing field. Above all, alignment across EU policy, industry initiatives, public-private partnerships, and research communities will be essential.