

The Recap: An Enriched Joint Session in Dresden

KEY TAKEAWAYS

- **AI's value starts with data quality.** Strong data governance is essential for unlocking AI's ability to improve forecasting, qualification, and operational efficiency across fabs and warehouses.
- **Onshoring remains challenging, but diversification works.** Domestic manufacturing faces high costs, tariffs, and long qualification times, and overseas shipping adds volatility. A multi-region strategy offers a more balanced and resilient solution.
- **Supply-chain risks demand cross-industry collaboration.** Feedstock dependencies, regulatory uncertainty, and transportation vulnerabilities remain top threats, underscoring the need for shared visibility, stronger buffer strategies, and joint digitalization efforts.



EVENT SUMMARY

On October 28, 2025, the Critical Materials Council™ (CMC), managed by TEHCET, convened to discuss current geopolitical and AI-driven technology challenges facing the semiconductor materials supply chain. The Fall CMC Joint Session brought together global leaders, from chip fabricators to materials and equipment suppliers, to compare perspectives on the forces slowing business growth and to explore how AI and digitalization could strengthen long-term resilience. The session opened with a fireside chat featuring Adam Schafer, CEO of Athinia, and Mike Walden, VP of TEHCET, who discussed the tangible productivity benefits AI is delivering today versus the hype surrounding it.

Schafer emphasized that high-quality data and strong governance are essential to unlocking AI's value across fabs and warehouses while Walden highlighted AI's growing role in improving materials forecasting, qualification, and process efficiency.

The discussion deepened during the panel on the benefits and challenges of localizing supply chains, featuring Robert Horn, Manager of Global Supply Management at GlobalFoundries and TC Ong, Commercial VP at Sunlit. The speakers examined whether onshoring can realistically offer cost-competitive advantages once logistics, domestic manufacturing costs, tariffs, and lengthy qualification times are accounted for. They noted that while onshoring may reduce some volatility associated with materials shipped by boat, where transit delays can cause unpredictable pricing and availability, it still faces structurally higher costs in smaller domestic markets. Ong further emphasized that tariffs and export controls, though intended to strengthen national security, can introduce new systemic risks of their own. Both panelists underscored that multi-region diversification remains a more resilient and balanced strategy than maximal onshoring, helping companies mitigate risk while maintaining access to global innovation ecosystems.

The session concluded with a candid discussion on the biggest risks to materials supply chains, led by John Birchenough, Director of Procurement at Infineon, and Nicolas Gosset, Advanced Materials Business Strategy & Development Manager for Europe at Air Liquide. The panelists identified feedstock dependencies, regulatory uncertainty, and transportation vulnerabilities as top threats while calling for more collaborative relationships between chipmakers and suppliers to preempt disruptions. Gosset noted that digitalization and AI tools are already improving visibility and predictive maintenance, reducing risk exposure. Meanwhile Birchenough urged the industry to reassess buffer stock strategies and identify single points of failure in a post-COVID environment. The event closed with interactive breakout sessions fostering collaboration across fabs, materials suppliers, and partners, signaling a unified effort to strengthen semiconductor supply chains for the years ahead.

Be on the lookout for updates on our next Joint Session on April 13th in Portland, Oregon. For more details, go to www.techcet.com.

ABOUT: TECHCET CA LLC is an advisory services firm expert in market analysis and business development of electronic markets and supply-chains for the semiconductor, display, solar, and LED markets. TECHCET offers consulting, reports, and the Critical Materials Council and DSS subscription services. For additional information, please email us, call +1-480-382-8336, or go to www.techcet.com