

Europe's fuel security takes center stage: INERATEC and Rheinmetall convene European leaders on fuel security

High-level event highlights decentralized synthetic fuel production as key to energy sovereignty, where INERATEC unveiled Lifeline product range

Frankfurt, 10 March 2026 – Cleantech pioneer INERATEC has unveiled Lifeline, a new product range of plants designed to produce synthetic fuels (e-Fuels) for critical infrastructure and defence applications. The unveiling took place yesterday at a high-level event co-hosted with Rheinmetall at INERATEC's operational ERA ONE plant and was attended by representatives of the EU Commission's DG Move, NATO, Members of the European parliament as well as senior defence and industry leaders. This underscores growing recognition across Europe that decentralized synthetic fuel production is becoming a strategic imperative for both energy sovereignty and defence readiness.

INERATEC has spent the past decade developing and scaling modular Power-to-Liquid technology that converts electricity, hydrogen, and CO₂ into drop-in synthetic fuels.

"While we initially focused on decarbonizing aviation and transport, the last years' geopolitical developments have revealed the strategic value of this technology for defence and critical infrastructure," said Tim Boeltken, CEO and Co-Founder of INERATEC. "Fuel supply is the strategic backbone of modern economies and defence capabilities. That's why we developed Lifeline – to bring decentralized synthetic fuel production to applications where resilience is paramount. It can help Europe reduce structural vulnerabilities while building a more secure and sustainable energy system."

Lifeline: Fuel production engineered for resilience

The newly unveiled Lifeline product line builds on INERATEC's existing modular fuel synthesis technology but is specifically engineered to meet the operational requirements of defence and critical infrastructure customers.

Lifeline plants are designed as containerized units that can be rapidly deployed in diverse locations and flexibly integrated with existing infrastructure. Built-in redundancies ensure operational resilience by maintaining continuous fuel output even when individual components are disrupted. Their decentralized architecture allows production to be deployed closer to demand while reducing reliance on long fuel supply chains. Crucially, the resilient fuels have been confirmed by the Bundeswehr Research Institute

for Materials to be fully compatible with existing military and civilian vehicles, aircraft, and infrastructure – enabling immediate operational use without technical modifications.

Giga PtX: a decentralized fuel network for Europe

To accelerate decentral fuel production, INERATEC is partnering with Rheinmetall and leading European cleantech companies and industry partners under the **Giga PtX initiative**.

The initiative aims to create a distributed network of modular Power-to-Liquid plants across Europe, capable of producing synthetic fuels from renewable electricity, hydrogen and CO₂. Each plant is designed to produce 4,000 to 7,000 tonnes of synthetic fuel annually, with the potential for a Europe-wide network delivering more than 20 million tonnes of resilient fuel production per year.

Such a decentralized production architecture could reduce European dependency on crude oil imports, diversifying supply structures while simultaneously lowering emissions across fuel supply chains.

INERATEC and Rheinmetall are currently in discussions with European stakeholders to secure financing and regulatory support for the first regional pilot projects.

ERA ONE demonstrates technology at scale

The event took place at INERATEC's ERA ONE facility in Frankfurt-Höchst – Europe's largest commercial-scale e-Fuel production plant. Operational since 2025, ERA ONE produces up to 2,500 tonnes of synthetic aviation fuel and e-Diesel annually, making it the first facility in Europe to deliver commercial volumes of Power-to-Liquid fuels. By convening policymakers and defence leaders at an operational production site, INERATEC demonstrated that the technology underpinning Lifeline is not experimental but proven and running at industrial scale.



Opening remarks by Ann Mettler, former Director General of the European Political Strategy Center



Members of the European Parliament (from left to right): Helder Sousa Silva, Barry Andrews, Lidia Pereira, INERATEC CEO Tim Böltken, Thomas Pellerin Carlin



Technology demonstration: INERATEC refuels a fire department vehicle with e-fuel produced in Frankfurt.



Visualization of the "Lifeline" product line for resilient fuel supply.

INERATEC is committed to defossilizing and decarbonizing the world. The company produces e-Fuels and e-Chemicals: carbon-neutral fossil fuel substitutes for use in aviation, shipping and chemical industries.

Its modular, scalable plants use renewable hydrogen and CO₂ to produce synthetic kerosene, gasoline, diesel, waxes or methanol. INERATEC has just opened Europe's



largest e-Fuels plant to date, in Frankfurt, which will produce up to 2,500 tonnes of ultra-low-carbon aviation fuel per year. The company is based in Karlsruhe, Germany and backed by a diverse group of international investors. www.ineratec.com