

## Decentralized e-SAF Production for Fuel Resiliency: INERATEC Showcases 'Lifeline' at ILA Berlin

- **'Lifeline' translates INERATEC's proven ERA ONE Power-to-Liquid platform into a mobile, containerized unit for rapid, on-site production of ASTM-compliant e-SAF and other synthetic fuels.**
- **On the ILA outdoor grounds, the 'Lifeline' container is exhibited alongside the Deutsche Aircraft A D328 Multi-Role Maritime Patrol Aircraft (MPA) as a fully integrated fuel-to-flight solution for sustainable and resilient aviation, validated by the German Bundeswehr's research institute for materials.**
- **Inside the exhibition halls, INERATEC is represented as a member of AIREG, the Aviation Initiative for Renewable Energy in Germany e.V. at the association's joint stand.**
- **As a building block of the Giga-PTX® initiative with Rheinmetall and other partners, each 'Lifeline'-based plant adds 4,000–7,000 tonnes of synthetic fuel capacity per year toward a decentralized European network targeting over 20 million tonnes of resilient fuel production.**

**Karlsruhe, 11 June, 2026** – European aviation fuel supply faces a structural challenge: its dependence on centralized infrastructure and global supply chains exposes fuel supply to disruptions caused by crises, conflicts, and infrastructure failures. At the same time, regulatory pressure to scale sustainable aviation fuels in accordance with the ReFuelEU Aviation Regulation is accelerating rapidly.

INERATEC 'Lifeline' addresses both challenges at once. The Karlsruhe-based technology company is presenting a fully equipped 'Lifeline' container to the international aviation industry at ILA Berlin 2026. The modular Power-to-Liquid unit is designed for the rapid, decentralized production of sustainable aviation fuel (e-SAF) and other synthetic fuels, wherever they are needed most.

Partnering at ILA Berlin, INERATEC and Deutsche Aircraft bring a "fuel-to-flight" ecosystem to life. This collaboration integrates INERATEC's modular synthetic fuel production systems with Deutsche Aircraft's D328® platforms to enable flexible, self-sufficient mission capabilities. By generating sustainable aviation fuel close to the point of use, the joint concept provides a scalable solution that enhances operational resilience and reduces aviation emissions in even the most remote environments.

Using proven Fischer-Tropsch synthesis technology, the containerized plants convert renewable electricity, hydrogen, and CO<sub>2</sub> into drop-in-ready e-SAF and other synthetic fuels. The fuels are ASTM-certified and compatible with existing aircraft and infrastructure, without any technical modifications. Compatibility has been confirmed by the Bundeswehr Research Institute for Materials, Fuels and Lubricants (WIWeB), underscoring the technology's readiness for both civilian and defense applications.

**Maximilian Backhaus, Chief Commercial Officer at INERATEC, said:**

“INERATEC offers a solution with off-grid-capable modular production systems and climate-neutral e-fuels. Locally produced energy sources are independent, flexible and sustainable, and make our supply resilient wherever it is needed most. Together with Deutsche Aircraft, we are demonstrating how local fuel production can directly power advanced aviation missions reliably and at scale.”

**Wolfgang Kuhl, VP Programs and Innovation at Deutsche Aircraft, added:**

“At Deutsche Aircraft, we are redefining mission readiness by integrating advanced aircraft platforms with decentralised energy solutions. This collaboration demonstrates how sustainable aviation and operational resilience can go hand-in-hand — especially in remote and demanding environments.”

## **Proven Technology Ready for Large-Scale Deployment**

The ‘Lifeline’ container shown at the ILA is built on the same technology platform that INERATEC already operates at industrial scale: ERA ONE at the Frankfurt-Höchst Industrial Park is Europe's largest commercial-scale Power-to-Liquid plant and produces up to 2,500 tonnes of e-fuels per year. Operational since 2025, ERA ONE is the first facility in Europe to deliver commercial volumes of Power-to-Liquid fuels, making it the definitive proof of concept for ‘Lifeline’.

‘Lifeline’ transfers this industrial-scale expertise into a mobile, rapidly deployable format: containerized, standardized and easy to service. Moreover, built-in redundancies ensure that continuous fuel is produced reliably even when individual components or supply paths are disrupted.

## **Giga-PTX®: Building a Decentralized Fuel Network for Europe**

‘Lifeline’ fuel synthesis is an integral part of the GigaPTX® initiative, in which INERATEC is partnering with Rheinmetall and other leading European companies to establish a distributed network of modular Power-to-Liquid plants across Europe. Each plant in the network is designed to produce 4,000 to 7,000 tons of synthetic fuel annually, with the potential for a Europe-wide network delivering more than 20 million tons of resilient fuel production per year. INERATEC and Rheinmetall are currently in discussions with

European stakeholders to secure financing and regulatory support for first regional pilot projects.

## Sustainable Regional Aviation

The placement of INERATEC's 'Lifeline' fuel synthesis unit alongside Deutsche Aircraft's planes at ILA reflects a shared commitment: bringing sustainable aviation fuels to regional aviation. Deutsche Aircraft is developing the D328eco, a regional aircraft designed for full e-SAF compatibility, while INERATEC provides the production technology for the fuel itself.

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**INERATEC** is a leading European pioneer in the production of sustainable e-Fuels and e-Chemicals. The company develops and deploys modular, scalable Power-to-X plants that convert renewable hydrogen and CO<sub>2</sub> into synthetic fuels and chemical products, enabling the de-fossilization of aviation, shipping and the chemical industry.

With ERA ONE, INERATEC has commissioned Europe's most advanced e-Fuels production plant, marking a critical step toward industrial-scale availability of sustainable fuels. Its technology allows decentralized production, strengthening energy resilience while supporting climate targets.

Founded in 2016 and headquartered in Karlsruhe, Germany, INERATEC is backed by a strong group of international investors and partners. More information: [www.ineratec.com](http://www.ineratec.com)

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