

# FROM FUEL DEPENDENCE TO FUEL SOVEREIGNTY FOR EUROPEAN RESILIENCE.

EUROPEAN eSAF COALITION STATEMENT

**Arcadia**<sup>®</sup>  
eFuels

**DIK**  
INERATEC

 norsk e-fuel

**SKYNRG**

**ZAFFRA**

# EUROPE'S RESILIENCE IS BEING TESTED.

Geopolitical instability, attacks on energy infrastructure, and fragile global supply chains — the result of decades of prioritising cost over resilience — have exposed the risks of strategic dependence: on imported fossil fuels today, and potentially on imported synthetic fuels tomorrow.

## Europe must change course.

For Europe, fuel sovereignty is now a strategic necessity. Europe must be able to produce, access and scale sustainable aviation fuels domestically to protect its connectivity, industrial competitiveness, climate leadership, and long-term security.

Aviation faces a dual challenge: reducing emissions while maintaining the connectivity, resilience and operational capability on which Europe's economy and security depend. Long-haul aviation will continue to require liquid fuels for the foreseeable future, making sustainable drop-in fuels essential to decarbonisation.

This makes the development of secure, scalable and domestically produced sustainable aviation fuels a strategic priority for Europe.

## WHY eSAF

eSAF is central to that ambition.

It can transform Europe's renewable energy resources, captured carbon, clean-tech expertise and industrial capacity into a secure and scalable fuel supply for the future. But this opportunity will not materialise without coordinated action and sustained investment.

eSAF is one of the most credible and scalable pathways for this transition. Produced from renewable electricity, green hydrogen, and captured carbon, eSAF can deliver substantial reductions in lifecycle emissions while avoiding many of the land-use, food-security and feedstock constraints associated with conventional biofuels. As demand for sustainable aviation fuels grows, eSAF can reduce pressure on limited biological feedstocks and provide an additional long-term pathway to cleaner aviation.

Because eSAF is a proven drop-in fuel, it can be used in existing aircraft, airports, pipelines, storage systems and refuelling infrastructure.

This allows Europe to cut aviation emissions using today's fleets and infrastructure, rather than waiting for entirely new aircraft designs or airport systems to be developed and deployed at scale. While hydrogen and electric aircraft may play important roles in the future, particularly on shorter routes, they cannot replace liquid fuels for long-haul aviation and defence applications.

eSAF also represents a major strategic industrial opportunity. Scaling production in Europe would drive investment across the value chain: renewable power, electrolysers, carbon capture, fuel synthesis, logistics, and advanced manufacturing. It would create high-skilled jobs, strengthen Europe's clean-tech industrial base and position European companies to lead in a rapidly growing global market for sustainable aviation fuels.

Its strategic importance extends beyond climate policy. A strong European eSAF industry would reduce dependence on imported fossil fuels, exposure to volatile oil markets, reliance on vulnerable centralised infrastructure and future dependence on imported synthetic fuels.

At the same time, it would enhance Europe's resilience by supporting defence readiness, emergency response capabilities and continuity of critical transport systems during geopolitical shocks or energy crises.

## **WHY eSAF**

**In short, eSAF is where aviation decarbonisation, energy security and European industrial leadership converge.**

**Scaling it is not simply a climate measure. It is a strategic investment in Europe's energy sovereignty, competitiveness, and resilience.**

## WHY NOW

Europe has the foundations to lead in eSAF: renewables, advanced catalyst and electrolyser technologies, and a strong project pipeline. More than 40 projects have been announced in response to the mandates introduced by ReFuelEU Aviation, representing over 60% of announced global eSAF production capacity. Yet large-scale eSAF production projects are not reaching final investment decisions at the pace needed.

**The problem is not a lack of project ambition.  
It is a lack of bankable demand, targeted support to close the cost gap, and long-term regulatory certainty to move first-of-a-kind projects from planning to construction.**

Delay carries a growing cost. Without urgent action, Europe risks an eSAF supply gap, continued exposure to volatile global fuel markets and a new dependence on imported synthetic fuels. As refinery capacity declines and geopolitical risks intensify, inaction would leave Europe less resilient and more vulnerable to external shocks.

Failure to act now would also mean lost industrial investment, fewer high-skilled clean-tech jobs, weaker technology leadership and diminished influence over the future global market for sustainable fuels. Meanwhile, other regions are moving fast to secure clean fuel value chains, using targeted incentives, public procurement, and coordinated industrial policy. Europe has the projects, technologies, and expertise to lead — but the window is closing.

Scaling eSAF is therefore not only a climate imperative. It is a strategic industrial choice: to secure cleaner aviation, resilient fuel supply, European jobs and long-term sovereignty.

## WE ENVISION A EUROPE THAT IS PREPARED, INDEPENDENT AND RESILIENT.

A Europe where jet fuel supply is secure, diversified and no longer exposed to repeated external shocks.

A Europe where clean domestic jet fuel production strengthens aviation, industry and defence.

A Europe where climate action, competitiveness, security, and sovereignty move together.

Our mission is to accelerate the deployment of eSAF as a strategic asset for Europe.

We advocate for the policy certainty, investment conditions and market frameworks needed to bring eSAF production at scale across Europe.

By replacing imported fossil fuels with renewable and low-carbon synthetic aviation fuels made in Europe, eSAF can strengthen fuel resilience, support industrial competitiveness and reduce strategic dependency.

Scaling eSAF in Europe means protecting value creation, creating skilled jobs, reinforcing clean-tech leadership and ensuring that aviation decarbonisation strengthens Europe's sovereignty rather than undermining it.

## **EUROPE SHOULD BUILD A RESILIENT, SOVEREIGN AND COMPETITIVE EUROPEAN FUEL SUPPLY CHAIN**

Europe must align climate, energy, transport, industry, finance and security policy to develop a secure and scalable jet fuel supply chain for the future.

This will require EU institutions, Member States, industry, investors and fuel users to mobilise around a shared strategic objective.

## 1. RECOGNISE EUROPEAN SUSTAINABLE FUEL PRODUCTION AS A STRATEGIC PRIORITY

European fuel production from locally sourced feedstocks, should be recognised as strategic infrastructure that supports decarbonisation, competitiveness, energy security and resilience. A domestic SAF and eSAF industry would reduce reliance on imported fuels and feedstocks, create high-value industrial jobs, strengthen Europe's renewable hydrogen and carbon utilisation value chains, and support the transition of one of the hardest-to-abate sectors.

EU and Member State funding instruments across climate, innovation, industrial policy, energy infrastructure, transport and resilience should be aligned to support first-of-a-kind and early commercial fuel production projects. Dual-use and security-related funding streams should also recognise the role of domestic fuel production in strengthening Europe's preparedness and continuity of operations.

Europe can no longer afford to treat liquid fuel supply, aviation decarbonisation, industrial competitiveness, energy security and defence readiness as separate policy challenges. The EU should develop a comprehensive European Fuel Supply Strategy as a cross-cutting framework for scaling domestic sustainable fuel production, securing feedstocks, accelerating permitting, building infrastructure and aligning public and private investment.

## 2. CREATE BANKABLE DEMAND SIGNALS

A resilient European fuel industry needs credible, long-term demand. Airlines, airports, fuel suppliers, logistics operators, corporate travel buyers, governments and public institutions all have a role to play in creating investment certainty.

Long-term offtake agreements, demand aggregation, public procurement, strategic purchasing and buyer-of-last-resort mechanisms can help de-risk early projects and accelerate market formation.

Public-sector demand, including aviation used for government, emergency response, security and defence purposes, can provide an important signal of political commitment. In parallel, EU and national stockpiling policies should assess how domestically produced sustainable fuels can strengthen resilience and reduce exposure to external supply disruptions.

### 3. BRIDGE THE COST GAP

Sustainable and resilient fuel production will not scale without early support. Today, SAF and eSAF remain more expensive than fossil jet fuel, and civilian aviation cannot be expected to carry the full cost of Europe's fuel security and industrial transition alone.

EU and Member State funding should be used to bridge the cost gap, support early production, and make long-term offtake commercially viable. Revenues from the EU Emissions Trading System and other aviation taxes should be earmarked more effectively to support aviation decarbonisation, including domestic SAF and eSAF production.

Targeted financial mechanisms, such as double-sided auctions, contracts for difference, production support, investment guarantees and finance support can help ensure that the transition does not stall on the balance sheets of airlines or first movers.

### 4. OPEN EUROPE'S JET FUEL MARKET

Europe cannot build an eSAF industry it cannot distribute.

Jet fuel infrastructure in Europe is dominated by a select few players that can block new entrants from holding inventory at European airports — raising costs, imposing exclusionary terms and, in some cases, denying access altogether. The investment case for eSAF — involving tens of billions of –euros in commitments with decade-long payback horizons — cannot be de-risked by demand mandates alone if downstream market access remains closed.

The Commission and national governments should investigate and address discriminatory infrastructure access at European airports, mandate non-discriminatory third-party access to fuel infrastructure under ReFuelEU Aviation obligations, and accelerate the establishment of a Book & Claim system for SAF.

With eSAF mandates taking effect in 2030, the window to act is closing. Open infrastructure access is the missing structural prerequisite for European eSAF investment to flow.

# EUROPE MUST ACT NOW

A resilient European jet fuel supply chain is not only a climate objective. It is a strategic requirement, and fuel reserves alone are not resilience. True resilience means domestic production capacity that can be scaled, diversified and sustained through disruption.

The capacity to produce critical fuels at home is essential to securing Europe's industrial future, strengthening energy independence, protecting critical transport systems, supporting defence readiness and keeping European aviation competitive in a rapidly changing global market.

Europe already has the technology, industrial capacity and policy tools to lead. What it needs now is coordinated action, long-term policy certainty and strategic investment to move from projects and ambition to production at scale.

The resilience of Europe's aviation sector will be shaped by the industrial choices made today. Scaling eSAF is one of those choices. It is a climate solution, an industrial opportunity and a strategic necessity.

**No fuel sovereignty.**

**No European resilience.**

**Now is the time to build both.**

**THE EUROPEAN eSAF COALITION** – Arcadia eFuels, INERATEC, Norsk e-Fuel, SkyNRG, and ZAFFRA brings together leaders across the full Power-to-Liquid value chain, from technology development and project delivery to fuel production, offtake and aviation market deployment. Collectively, its members represent a multi-billion-euro eSAF opportunity, with activities across key markets including France, Germany, the Nordics, Spain and major European aviation hubs.

Over the coming decade, Coalition projects have the potential to scale to hundreds of thousands of tonnes of domestically produced eSAF annually. This would strengthen Europe's industrial base, energy security, aviation competitiveness and climate resilience, while helping to reduce dependence on imported fossil fuels.

Together, the European eSAF Coalition is building the foundations for a more secure, competitive and sustainable Europe. By scaling domestic eSAF production, strengthening industrial capacity, supporting defence readiness and enabling the future of sustainable aviation.

**Arcadia eFuels** is an early mover developing commercial-scale eSAF produced from renewable power, water and captured carbon. The company brings project development expertise, commercial experience in bringing new products to market, and experience operating large chemical and refinery assets. With a flagship project in Denmark, Arcadia has a growing European and global pipeline aimed at accelerating the deployment of industrial-scale Power-to-Liquid production.

**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 defossilization of aviation, shipping, and the chemical industry. With ERA ONE, INERATEC has brought Europe's most advanced e-Fuels production plant into operation, marking a key 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)

**Norsk e-Fuel** develops industrial-scale facilities to produce eSAF and other synthetic fuels from fossil-free electricity, water, and captured CO<sub>2</sub>. With projects across the Nordic region, the company is building a regional value chain with strong strategic partnerships for sustainable fuels, leveraging abundant clean energy resources to help defossilise aviation.

**SkyNRG** founded in 2009, SkyNRG has driven the development of sustainable aviation fuel (SAF) supply and production pathways, building partnerships across the industry to advance aviation decarbonization. Its SAF facilities include DSL-01, a renewable fuels plant in the Netherlands that employs a HEFA pathway to convert residual fats and greases into SAF, and SkyKraft, an eSAF project in Sweden developed in collaboration with Skellefteå Kraft.

**ZAFFRA** is the joint venture formed by Topsoe and Sasol. Backed by commercial-scale technology and deep build-to-operate experience, ZAFFRA advances projects from early development through financing, construction start-up and operations – ensuring a reliable, long-term supply of eSAF to help future-proof sustainable flight for generations to come.

