BRIEF

Access to SAF in Europe

Effects of ReFuelEU Aviation (RFEUA)

Introduction

The recent entry into force of ReFuelEU for Aviation (RFEUA) in January 2025 is already presenting significant challenges to aircraft operators in Europe.

RFEUA imposed the obligation on fuel suppliers to supply Sustainable Aviation Fuel (SAF) to airports in the European Union (EU). Although the obligation is placed on fuel suppliers, they will naturally seek to pass on the cost of compliance to their airline customers. Airlines shouldering such additional costs must be able to receive the necessary sustainability certification documents from their suppliers, enabling them to claim the associated environmental attributes under greenhouse gas emissions schemes such as the European Union Emissions Trading System (EU ETS).

In a free, open, and mature market, one could assume that airlines can choose at which airport to uptake SAF and that airlines would be able to negotiate a fair price for their SAF procurement. In a supply-constrained and immature market, as is currently the case at most EU airports, the reality is that competition among fuel suppliers is limited. More than a third of EU airports have three or fewer fuel suppliers[1], who can exploit their dominant position to dictate contractual and pricing terms to the airlines.

Fuel suppliers have not embraced the approach of contracting mandated quantities of SAF with airlines but have instead preferred to pass their cost of compliance on to airlines, in the form of a "ReFuelEU compliance fee or surcharge" irrespective of the airlines' preference for a SAF supply contract.

While a fair compliance fee that is based on the equivalent cost of procuring SAF in the market could be acceptable, provided the sustainability documentation is also made available to the airlines, fuel suppliers are instead imposing compliance fees that are on average equivalent to **twice the prevailing market price premium of SAF**[2] — or over four times the price of conventional aviation fuel (CAF). Even with this highly inflated fee, there is no assurance that suppliers will meet their SAF obligation, nor that airlines will obtain the necessary documentation for their environmental claims.

Jet fuel supply in Europe: Historical context

Long before any discussions regarding SAF, airlines in Europe faced monopolistic or market-dominant fuel suppliers at many airports in the region, who were subjected to very limited competition. Consequently, airlines often paid excessive prices for the jet fuel they needed to operate their flights. In the 1970s, some airlines started implementing self-supply programs, and others sought strategic partnerships with fuel suppliers, both at their main hubs. While this did not immediately solve the problem at every airport, it boosted airlines' negotiating power: if prices were unreasonably high in one location, airlines could reduce the volume uplifted

[1] **See Chart 1**
[2] **Airline survey; see Chart 2**

there and instead uplift more fuel at their hubs, where they benefitted from efficient supply chains and lower costs.

Competition in fuel supply in Europe also benefited somewhat from the Ground Handling Directive, published in 1996, which sought to ensure free competition in areas such as maintenance, fuel provision, and freight handling at airports across the EU. However, competition in fuel supply involves a broader range of activities than the specific uplifting of fuel to aircraft performed by into-plane service providers, and these are not covered in the directive.

Fuel supply contracts in the context of RFEUA

The anti-tankering provision contained in Article 5 of the regulation, which stipulates that airlines must uplift at least 90% of the fuel needed to operate flights from every individual airport annually, is helpful to fuel suppliers in terms of securing a market for the SAF that they provide to meet their obligations under RFEUA. However, an unintended consequence of this provision is that it severely curtails airlines' ability to negotiate fuel supply contracts and avoid excessive prices, especially considering that, today, around 40% of the airports expected to be affected by RFEUA have three or fewer suppliers, while only a quarter of airports have more than a handful of competing fuel suppliers (Chart 1). Furthermore, some of the airports with a significant number of suppliers present are less competitive than they seem because all the suppliers buy their fuel from a single source.

Chart 1: Number of fuel suppliers per airport that are in-scope of RFEUA

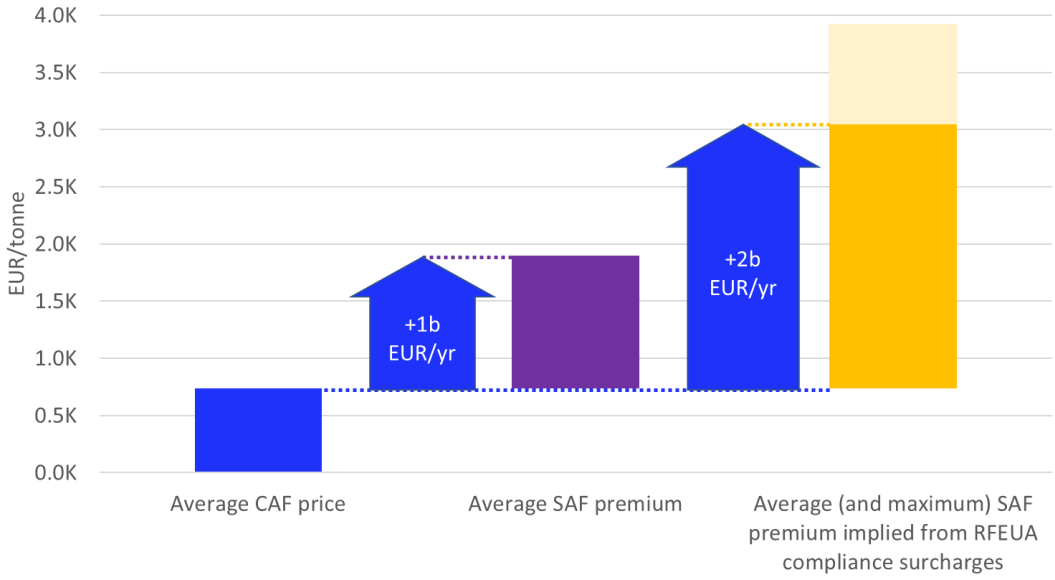
Source: IATA Sustainability and Economics, IATA Fuel Quality Pool (IFQP)

The impact of RFEUA compliance surcharges on airlines

The immediate effect of RFEUA is that the contract offers that airlines receive for fuel supply in Europe in 2025 include SAF surcharges that translate to SAF prices that significantly exceed the SAF price in the non-mandated SAF market in Europe. IATA recently conducted a survey among its member airlines operating at airports covered by RFEUA, according to which the RFEUA compliance fees equate to SAF price premiums that are on average, twice the current market premium, as published by reporting agencies such as Argus Media and S&P Global Commodity Insights. In some cases, the surcharge was as much as three times the market price premium over CAF. There are no amount of additional costs pertaining to logistics for SAF or otherwise that justify price differences of this magnitude.

Expressed in euros, a "fair" surcharge of EUR 25/tonne would already add EUR 1 billion to airlines' fuel costs in the first year of RFEUA (Chart 2), given the 42 Mt of fuel sold annually in Europe and assuming a 2% blend across the board.[3] With the average surcharge quoted in supply offers for 2025 being around EUR 50/tonne, airlines would face EUR 2 billion in extra fuel costs on top of the price of jet fuel annually.

Chart 2: Average price of conventional aviation fuel, of SAF, and of the surcharge in Europe, euros per tonne, 2024



Source: IATA Sustainability and Economics, S&P Global Commodity Insights

Making ReFuelEU Aviation work

There is hope that some of the oligopolistic price behaviors discussed above could be alleviated, thanks to Article 15 of the RFEUA regulation, which introduces a flexibility mechanism to reduce compliance costs for fuel suppliers, while also avoiding unnecessary logistics and emissions implications in deploying SAF. However, the EC has yet to publish specific guidelines with details of its implementation.

Existing supply chains have been established to meet airlines' demand for large volumes of aviation fuel, almost entirely met with CAF today. However, SAF is supplied in smaller volumes, and logistics costs can rise quickly, particularly at smaller airports.

One concern for airlines with existing SAF offtake agreements with SAF producers is that they are unable to use the SAF purchased via these agreements to meet their other suppliers' mandate obligation, unless those suppliers are willing to buy the SAF from the airline and then sell it back to them at airports covered by the regulation. The direct consequence is to make entering offtake agreements much less attractive to airlines in Europe. This concern could be addressed by allowing airlines with SAF offtake agreements to use that SAF to relieve their suppliers from their portion of the RFEUA obligation without the need for buy-sell transactions, taking advantage of more efficient supply chains. A robust SAF accounting mechanism could enable such efficiency gains through a central registry.

[3] Based on the difference between the average CAF price and average SAF price in Europe in 2024. This surcharge applies to the entire fuel volume (i.e., SAF and CAF).

A further concern regarding the flexibility mechanism is that it is impossible for fuel suppliers to concentrate fuel supply at a single airport across their network in Europe, restricting the flexibility to a mass-balance approach within the territory of specific States. State-specific obligations for fuel suppliers fail to leverage on the advantage of having a European Union, and targets imposed on individual States by the Renewable Energy Directive (EU RED) will impair flexibility. From a supplier's perspective, a cross-border flexibility mechanism is essential to avoid inefficient physical delivery of SAF in every State, avoiding additional costs and emissions. Flexibility for suppliers to comply with their RFEUA obligations at the European level would greatly benefit, furthermore, from the proposed extension of the existing Union Database (UDB) for biofuels to include SAF. This too would provide a robust registry to support adequate accounting of carbon emissions reduction associated with the use of SAF.

The incentives from EU ETS

As announced in 2024, the EU ETS will allocate 20 million free allowances to incentivize the uptake of SAF by helping to bridge the price differential between CAF and SAF during the period between 1 January 2024 and 31 December 2030. This is in addition to the benefit that airlines obtain by claiming SAF use in the EU ETS, where carbon emissions from SAF are considered to be zero. However, airlines' claims for SAF use under the regulation require the product to be physically delivered to the airports from which their flights are departing. Consequently, airlines may not enjoy the same degree of flexibility under EU ETS that is afforded to their fuel suppliers under RFEUA. It would be important to ensure consistency across EU regulations.

Non-European airlines and "dual conformance"

Many airlines operating flights departing from European airports are based outside of Europe, and most of these do not have any obligations under EU ETS. Since EU RED[4]-certified SAF is not eligible for claims under CORSIA, visiting carriers do not have any comparable incentive to that of European airlines to buy the SAF and claim the environmental benefits under the EU ETS.

Dual conformance is when a batch of SAF may be recognized and certified as fulfilling the sustainability requirements stipulated under two different compliance frameworks, such as EU RED and CORSIA, at the same time. With the appropriate SAF accounting mechanisms and tools in place, SAF supplied as part of RFEUA could also be certified for CORSIA compliance. Dual conformance would provide a clear incentive for visiting airlines to buy the SAF that suppliers offer as part of their RFEUA compliance. Without dual conformance, suppliers in the EU will also lose opportunities to sell their SAF to visiting carriers beyond the mandate.

Conclusion

The entry into force of the SAF mandate regulated in RFEUA has already had negative and unintended effects on the SAF market in Europe, exacerbated by a highly concentrated fuel supply market, and by incomplete implementation guidance. The resulting impact on airlines could reach an additional EUR 1 billion in 2025, taking the full RFEUA bill to over EUR 2 billion annually.

If the issues discussed above are not addressed, these unintended consequences arising from the implementation of RFEUA will continue to generate strong headwinds for SAF offtake beyond the mandates and drive the costs of the energy transition higher still for the European airline industry, without generating the equivalent reduction in carbon emissions.

[4] The Renewable Energy Directive (RED) establishes the sustainability framework and criteria for SAF eligible under RFEUA and EU ETS