

ANALYSIS | 03 SEPTEMBER 2026

The SAF volume mandate is no longer enough

Brazil is shifting the policy debate from litres of fuel to verified emissions reductions, environmental attributes and interoperable registries. Asia should pay attention - but not abandon volume floors.

EC-Impact policy brief | Sustainable Aviation Fuel | Analysis based on official Brazilian and UK policy sources

22% UK SAF mandate share of total fuel from 2040	GHG Brazil frames the airline obligation as annual GHG reduction	18 DEC 2026 deadline for ANP/ANAC implementing rules
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The first problem was volume

For the first phase of the still-nascent SAF market, policymakers needed one thing above all: demand certainty. Volume mandates did that. They told producers and investors that a growing share of aviation fuel would have to be sustainable, creating an offtake signal strong enough to start underwriting new capacity.

But volume is a proxy, not the objective. Aviation is not trying to consume SAF for its own sake. It is trying to reduce emissions. A litre of fuel is therefore an incomplete unit of policy value unless its lifecycle carbon performance is also reflected.

Aviation is not trying to consume SAF. It is trying to reduce emissions.

The UK already prices carbon performance into compliance

The UK remains a volume-based mandate: SAF accounts for 2% of total aviation fuel in 2025, rises to 10% in 2030 and reaches 22% from 2040. But the compliance mechanism is more sophisticated than those headline percentages suggest.¹

Eligible fuel must achieve at least a 40% lifecycle GHG saving. Above that threshold, the number of SAF Certificates awarded is proportional to the fuel's GHG saving and energy density. In other words, stronger carbon performance already has greater compliance value.²

That matters. A tonne of SAF delivering a 90% lifecycle reduction should not be treated economically as equivalent to a tonne delivering 60%. The UK mechanism already embeds that principle.

There is, however, a structural limit. The UK currently permits mass balance for chain-of-custody reporting and explicitly does not permit Book & Claim under the SAF Mandate.²

Brazil goes further: the obligation is emissions reduction

Brazil's ProBioQAV moves the regulatory logic another step. The obligated party is the airline operator, and the policy obligation is framed as an annual target for GHG emissions reduction, rather than simply a prescribed physical blending percentage.³

Decree No. 13,094 of 12 August 2026 then creates the market infrastructure around that objective. Its CS-SAF certificate records the environmental attribute of qualifying SAF, including lifecycle emissions data and the percentage reduction versus fossil fuel.³

UK vs Brazil: similar direction, different architecture

	UK SAF Mandate	Brazil ProBioQAV
Obligation	Rising SAF share of aviation fuel	Annual GHG-reduction target for operators
Carbon signal	Certificate award scales with GHG saving	CS-SAF carries quantified lifecycle reduction
Chain of custody	Mass balance; Book & Claim not allowed	Certificate can move separately from physical SAF
Infrastructure	Central UK compliance system	Authorised registrars + interoperable platforms

The environmental attribute can now move independently

The Brazilian decree explicitly allows CS-SAF to be transacted separately from the physical SAF, provided the physical molecule is sold without the environmental attribute and double counting is prevented. Transactions - issuance, ownership transfer and retirement - must be recorded through authorised registrar platforms.³

That is the important shift. Brazil is not merely attaching a carbon score to a litre of fuel. It is creating regulated infrastructure through which the verified decarbonisation value can be allocated independently of where the physical molecule is consumed.

The decree also requires those platforms to support interoperability with internationally recognised certification and registry systems, including systems associated with CORSIA, while preserving traceability, uniqueness and anti-double-counting controls.³

But do not overstate what Brazil has already delivered

The architecture is now in regulation; the operating system is not yet fully mature. ANP and ANAC must issue the implementing rules required by the decree by 18 December 2026. The decree itself anticipates an interim period before an operational electronic system exists for backing, issuance, registration and retirement of CS-SAF.³

That distinction is important. Brazil has established the direction and legal architecture. The quality of the market will still depend on implementation: eligibility rules, data standards, governance, registrar authorisation, claims treatment and enforcement.

Why separating molecule and attribute matters

SAF production and aviation demand will never align perfectly geographically. Production will concentrate where feedstock, renewable electricity, hydrogen, refining infrastructure, logistics and capital are most competitive. Airline demand remains dispersed across hundreds of airports.

A scalable market therefore needs to optimise two different things at the same time: where the physical fuel can be produced and deployed efficiently, and where the verified environmental value should ultimately be allocated.

Book & Claim is not a substitute for physical decarbonisation. The SAF still has to exist, meet sustainability criteria, be traceable and be used in aviation. Book & Claim is an allocation mechanism. Its credibility depends on MRV, chain of title, transfer rules, retirement and rigorous prevention of double counting.

The policy architecture is moving in four steps

1	2	3	4
VOLUME Create demand certainty	CARBON Reward better GHG performance	ATTRIBUTES Define ownership, transfer, retirement	INTEROPERABILITY Connect compatible systems

The emerging end-state is unlikely to be one global SAF registry. More plausibly, it will be a network of interoperable systems recognising compatible attributes under common data standards, defined eligibility rules and robust anti-double-counting controls. Brazil's decree is notable precisely because it points in that direction.

Asia should not simply copy Europe

This is where the argument becomes especially relevant for Asia. The region combines major aviation demand, significant SAF production potential, fragmented geography, uneven physical access to SAF and national policy timelines that are unlikely to converge quickly.

That means Book & Claim and interoperability may be more structurally important in Asia than in more geographically integrated markets. Requiring the physical molecule to follow every individual compliance or Scope 3 demand point could create unnecessary logistics cost and constrain access.

But replacing volume mandates with certificates would be the wrong conclusion. Volume floors still provide the demand certainty needed for projects to reach final investment decisions. The stronger policy architecture is hybrid.

A HYBRID ASIAN SAF ARCHITECTURE

Volume floors for demand certainty
Carbon-intensity incentives for stronger climate performance
Dedicated support for eSAF / Power-to-Liquid while those pathways scale
Book & Claim to reduce unnecessary geographic constraints
Interoperable registries to preserve integrity across markets
Corporate Scope 3 demand as an additional revenue layer

Scope 3 demand can strengthen bankability - but it is not capital by itself

Corporate SAF-certificate demand can be powerful, but the causal chain needs to be stated precisely. A certificate purchase is not automatically project finance. It creates additional demand and revenue visibility; aggregated into recurring offtake, that revenue can improve project bankability and help mobilise capital.

This is where travel-management ecosystems and other aggregators could matter. Individual companies may struggle to create sufficient SAF demand on their own. Aggregators can consolidate fragmented Scope 3 demand into larger, recurring procurement pools - provided claims rules are robust and the same environmental benefit is never counted twice.

The question Asia should be asking

Not only: “What percentage of SAF should we mandate?”

But: “What level of aviation decarbonisation do we want, which technologies need support to reach scale, and what market architecture can deliver that outcome at the lowest total system cost?”

Brazil does not provide every answer. Its implementation still has to prove that the registry model can operate with high integrity and acceptable transaction costs. The UK, meanwhile, demonstrates how carbon performance can be embedded in certificate economics even within a volume mandate.

Taken together, the direction of travel is becoming clearer: from mandating molecules, to valuing carbon performance, to managing environmental attributes, and ultimately to connecting those attributes across interoperable markets.

For Asia, the opportunity is to design with that evolution in mind from the outset rather than retrofit it later.

What this means for the market

PRODUCERS	AIRLINES
Higher-GHG-saving fuel can command greater policy and attribute value; registry design affects route-to-market.	Compliance becomes an emissions-reduction and portfolio-allocation problem, not only a physical procurement problem.
CORPORATES / TMCs	INVESTORS / LENDERS
Aggregated Scope 3 demand can create recurring SAFc revenue pools, subject to credible claims and retirement.	Policy architecture affects revenue certainty, attribute monetisation and therefore project bankability.

Sources & policy notes

1. UK Department for Transport, SAF Mandate compliance guidance 2026. Mandate shares expressed as % of total fuel: 2% (2025), 10% (2030), 22% (2040 onwards).
2. UK Department for Transport, RTFO and SAF Mandate technical guidance 2026. Minimum SAF GHG saving 40%; certificate award proportional to GHG saving and energy density; mass balance permitted; Book & Claim not permitted.
3. Brazil, Decree No. 13,094 of 12 August 2026 (ProBioQAV). Defines annual GHG-reduction obligations, CS-SAF registry infrastructure, separate transaction of environmental attributes, transfer and retirement, interoperability requirements and the 18 December 2026 implementing-rule deadline.

Official sources: gov.uk / Department for Transport; Presidência da República and Senado Federal, Brazil. Policy status checked 3 September 2026. This note is analysis, not legal advice.

Source links: [UK compliance guidance](#) | [UK technical guidance](#) | [Brazil Decree 13,094/2026](#)