France Hydrogène
Engagée pour la transition écologique

e-SAF: unlocking Final investment decisions in Europe

NOVEMBER 2026

Europe's e-SAF production capacity is within reach

A slight initial delay, not a structural capacity shortage.

Europe has **54** e-SAF projects, representing **3.3 million tonnes** of potential annual production capacity by 2035 — more than required under ReFuelEU Aviation.

Around **0.3 Mt/year** is close to FID, against an estimated need of **0.55 Mt/year** in 2030.

A further **0.74 Mt/year** of advanced projects could contribute as early as **2031** if investment decisions are made rapidly.

The challenge is timing, not capacity

Turning projects into investments

The last instruments needed to complement ReFuelEU Aviation and trigger FIDs are taking shape.

A double-sided auction for eSAF in the 2027 French finance bill

Up to 160 kt of eSAF/year

Brings to

2
FIDs on large projects

2%
eSAF French mandate in 2032

15 years
Contract with eSAF producers
to make the project more predictable and reduce production costs, thanks to a longer capital amortization period (compared with 10-year DSAs)

Comparison (example) of production bidding prices for a same project, depending on the contract duration

Secured to 10 years	7050
Secured to 15 years	6700

Most ambitious eSAF DSA in Europe
And, at this time, the only mechanism that handles volumes at the scale required by regulations

If adopted, its design could pave the way for other large-scale mechanisms across Europe

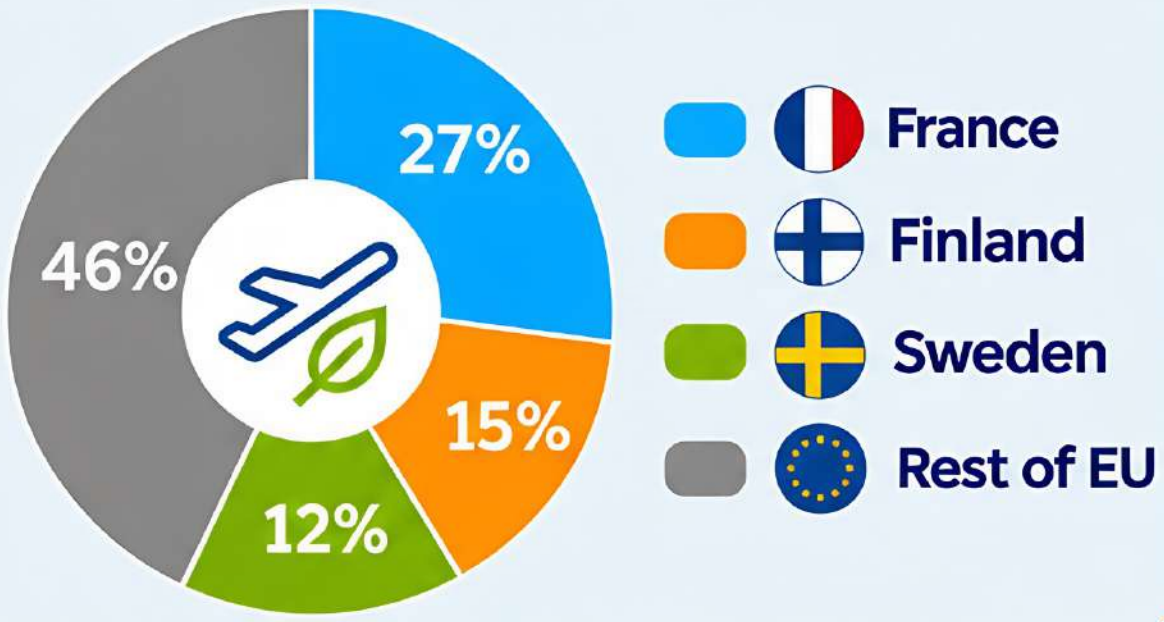
Decarbonised electricity mixes : a European advantage

Hybrid production by design.

France, Finland and Sweden account for **54%** of Europe's planned e-SAF production capacity by 2035.

In these electricity systems, e-SAF production is inherently hybrid, combining RFNBO and non-fossil synthetic aviation fuels.

Share of EU countries with low-carbon grid in e-SAF production volumes by 2035



Non-fossil synthetic aviation fuels are therefore indispensable to the development of Europe's e-SAF industry

France : a strategic pipeline for EU

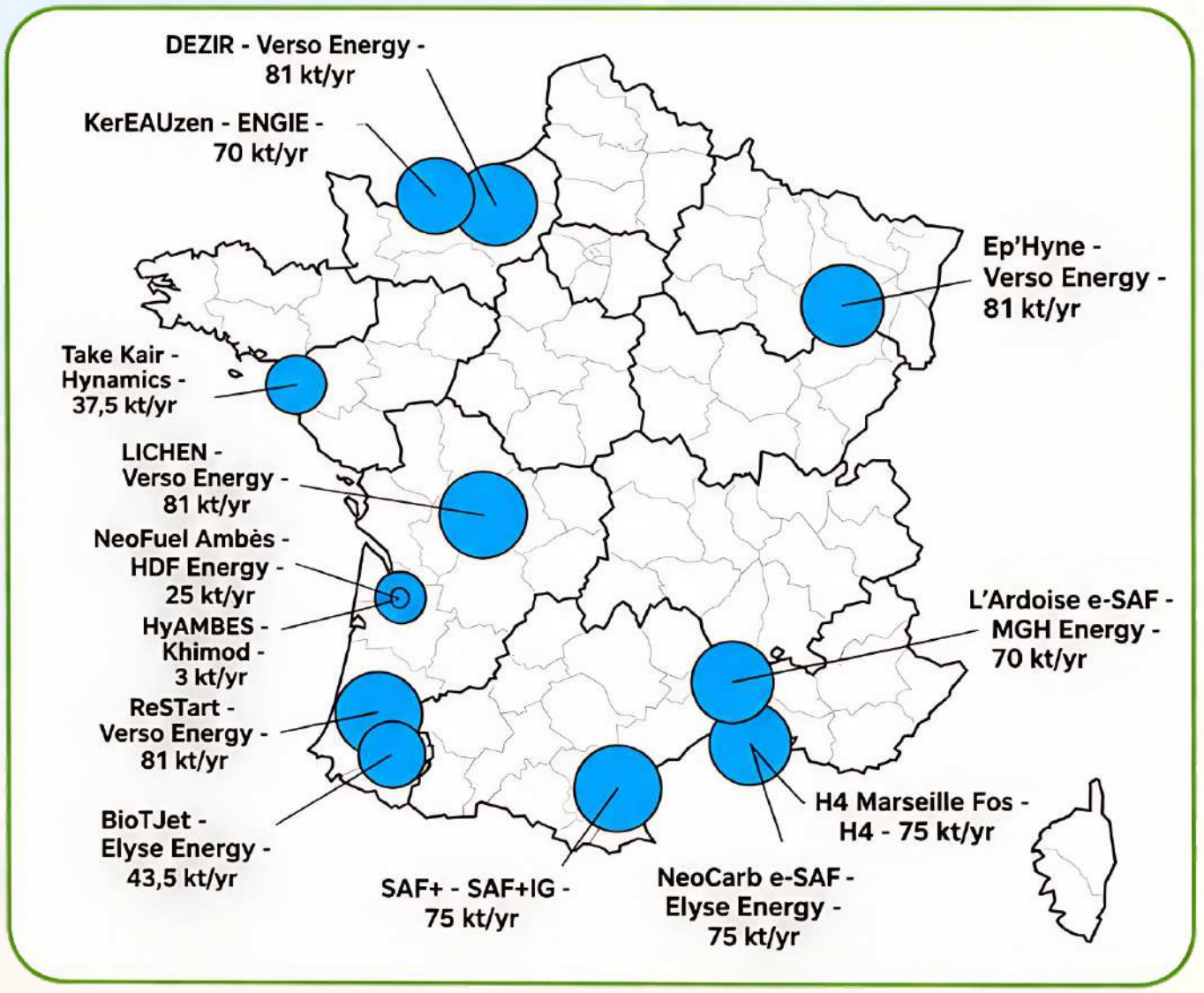
France's e-SAF projects are a strategic asset for European supply.

13 e-SAF projects

~800 kt/year

Potential capacity by 2035

France has Europe's largest e-SAF project portfolio, with the first major facilities potentially coming online from 2030–2031.



There is no structural capacity shortage

However, unequal treatment of RFNBO and non-fossil synthetic aviation fuels would create regulatory uncertainty, block advanced hybrid projects and create a real capacity shortage.

France Hydrogène's recommendations

Europe has the projects.

Three priorities to turn them into production.

01 **Preserve** the integrity of e-SAF mandates



02 **Prioritise** a European production base



03 **Ensure** equal treatment of all e-SAF pathways recognised under ReFuelEU Aviation (renewable and non-fossil)



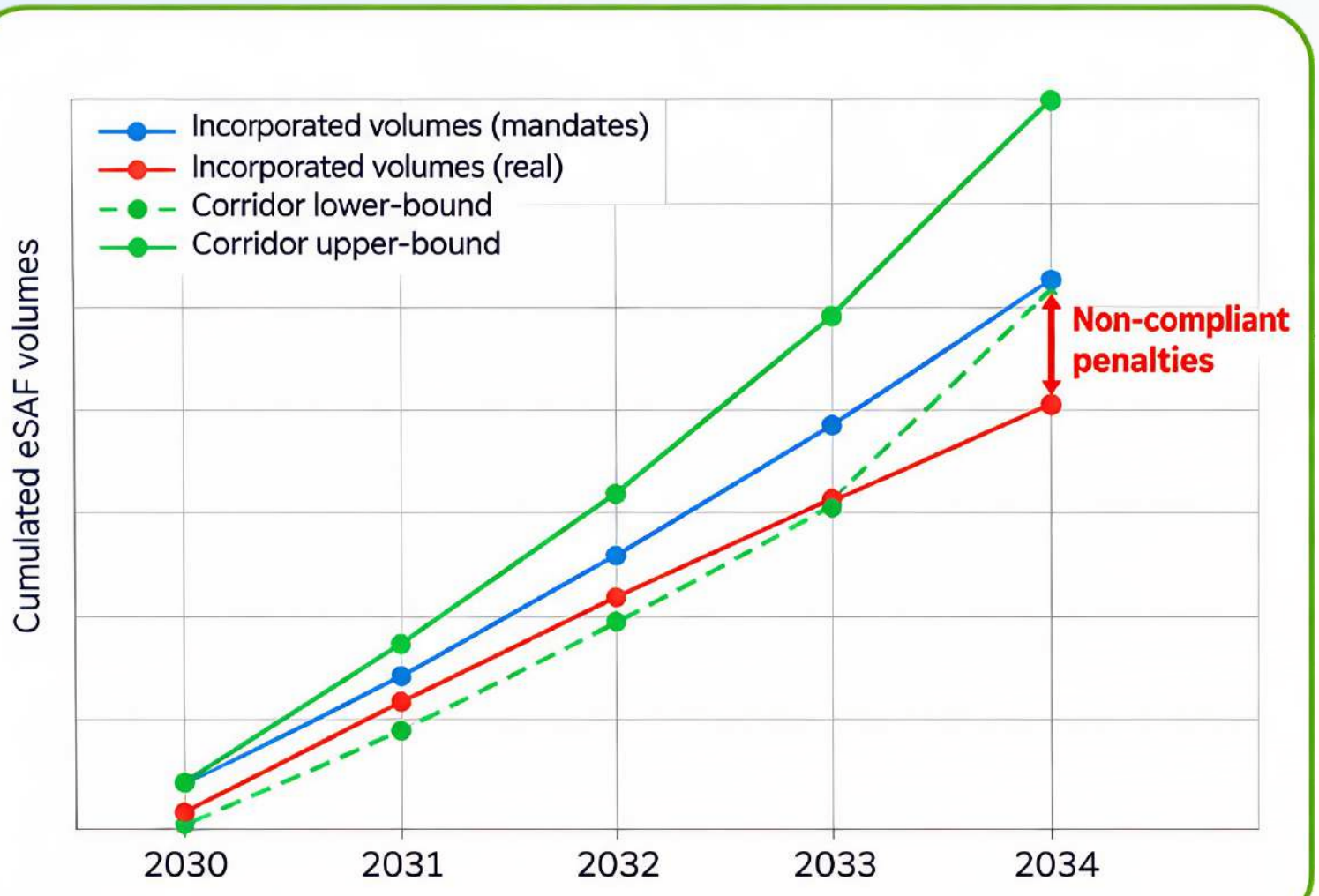
Recommendation 1

Preserve the integrity of mandates (1/2)

ReFuelEU Aviation: absorb the initial delay without reopening the mandates.

In its report on **ReFuelEU Aviation**, the European Commission should provide for a **multi-year gap account for 2030–2034**, allowing temporary flexibility in e-SAF incorporation without changing the cumulative volumes required under the regulation.

Flexibility is subject to compliance with the defined corridor. **Any initial shortfall must be fully offset by 2034.**



Temporary flexibility.
Unchanged cumulative ambition.

Recommendation 1

Preserve the integrity of mandates (2/2)

Keep eHEFA outside the ReFuelEU Aviation e-SAF sub-quota.



The use of electrolytic hydrogen in HEFA processes can reduce emissions from biofuel refining, but does not fulfil the specific purpose of the e-SAF sub-quota: decarbonising aviation beyond sustainably available volumes of biomass.

Clarify in the targeted revision of the RFNBO Delegated Acts that **eHEFA cannot be counted as e-SAF under the ReFuelEU Aviation sub-quota,** in line with the clarification in the Delegated Act defining low-carbon fuels.

Recommendation 2

Prioritise a European production base (EU ETS)

Make EU ETS support a driver of European e-SAF production.

01 Support European production



Maintain the reservation of **SAF allowances for fuels produced in Europe** under the revised EU ETS.

02 Strengthen long-term purchase commitments



At least
30 million
SAF allowances allocated to the book-in-advance mechanism.



5 years
Increase the minimum duration of firm supply contracts eligible for the book-in-advance mechanism to five years.

Assess the benefits of extending this minimum duration beyond five years.

Recommendation 3

Ensure equal tratment of all e-SAF pathways recognised under ReFuelEU Aviation (1/2)

EU ETS / SAF allowances: remove a major distortion.

ReFuelEU Aviation recognises both RFNBO and non-fossil synthetic aviation fuels under **the same e-SAF sub-quota.**

Proposed EU ETS revision (2031–2040)

RFNBO e-SAF
Up to
60%

Non-fossil e-SAF
0%
No equivalent coverage

Coverage of the cost gap with conventional jet fuel through SAF allowances.

Our recommendation: provide a rate of **60%** coverage of the cost gap with conventional jet fuel for non-fossil synthetic aviation fuels by SAF allowances, in line with the rate provided for RFNBOs.

Recommendation 3

Ensure equal tratment of all e-SAF pathways recognised under ReFuelEU Aviation (2/2)

RED IV: align national accounting with ReFuelEU Aviation.

Non-fossil synthetic aviation fuels count towards the ReFuelEU Aviation e-SAF sub-quota, but **do not contribute** to Member States' renewable energy targets in the same way as RFNBOs.

Under the **post-2030 framework,** allow non-fossil synthetic aviation fuels to contribute to both:

- **Member States' overall clean energy targets**
- **Their specific transport targets**

One European ambition requires a coherent regulatory framework.

Secure investments.
Preserve ambition.
Build Europe's e-SAF industry.

Europe has the industrial potential to meet its e-SAF ambitions.

The priority now is to unlock final investment decisions.

Read our full position paper

