# France Hydrogène – NLHydrogen joint position paper

## Franco-Dutch Pact for Innovation and Sustainable Growth Summit 2026

## Context

Hydrogen has emerged as a priority of the Franco-Dutch Pact for Innovation and Sustainable Growth. This Pact was signed in April 2023 to facilitate collaboration between France and The Netherlands, fostering a common approach that helps bring about sustainable growth and a higher level of economic prosperity.

Both countries are committed to realising the energy transition and the decarbonisation of our industry, and regard hydrogen as one of the key pathways for this. Therefore, the hydrogen communities in both countries work together in a so-called Hydrogen Working Group under the Franco-Dutch Innovation Pact.

France and the Netherlands are frontrunners in for hydrogen deployment in Europe, combining highly complementary assets:

- **France:** abundant low-carbon electricity, strong industrial base, large-scale project pipeline
- **Netherlands:** major port infrastructure, logistics hubs, early market activation in transport and industry

This bilateral cooperation can accelerate the emergence of a North-West European hydrogen ecosystem, connecting production, imports, infrastructure, and end-uses. Strengthened bilateral alignment is critical to:

- Ensure regulatory consistency (notably on RED III transposition and RFNBO implementation)
- Enable cross-border infrastructure planning (hydrogen backbone, ports, industrial clusters)
- Create credible demand signals at scale, supporting investment decisions across the value chain

**The Hydrogen Working Group in the Franco-Dutch Pact contributes to this bilateral alignment, by exchanging more insights on the following themes:**

- **Technology** – sharing best practices and state-of-the-art technologies and projects
- **Value chain development** – how can separate projects and technologies be connected in value chains, and how do we match supply, demand and required infrastructure?
- **Policy framework** – how do government parties facilitate value technology and value chain development in both countries.

**This position paper focuses on road mobility and the production of synthetic aviation fuels (e-SAF),** two sectors in which France and the Netherlands have adopted or are actively advocating for structuring public policies to support market development. Both sectors also offer significant potential for Franco-Dutch synergies, notably through cross-border infrastructure development, industrial cooperation and the sharing of best practices. **For road mobility, it calls for scaling up hydrogen trucks and refuelling stations along the North Sea-Rhine-Mediterranean corridor, and for France to introduce a support scheme equivalent to the Dutch SWIM**, building on shared experience. **For e-SAF, it recommends coordinated national double-sided auction mechanisms**, with the possibility of progressively moving towards a joint or European framework. **Finally, it sets out common messages to the European institutions**: the creation of clean lead markets, a swift revision of the RFNBO delegated acts, and the preservation of hydrogen targets and mandates in RED IV.

# Road mobility

## Context

France and the Netherlands have strong potential to accelerate hydrogen deployment in road transport, particularly in heavy-duty mobility. Hydrogen can be especially relevant for high-mileage operations where long range, short refuelling times and payload constraints make battery-electric solutions more challenging. Through the Franco-Dutch Innovation Pact, both countries can leverage their complementary strengths in hydrogen production, logistics, infrastructure, and innovation to support the rollout of hydrogen-powered trucks and refuelling networks. By aligning policies and developing cross-border transport corridors, the Pact can help reduce barriers to adoption and accelerate the transition to zero-emission freight transport.

## Description of policy

In the **Netherlands** the scaleup of hydrogen in road mobility has two main drivers: the **2 Petajoule target for the direct use of RFNBOs** (Renewable Fuels of Non-Biological Origin, such as renewable hydrogen) in road transport creates guaranteed demand for sustainable hydrogen towards 2030, making investments in vehicles, refuelling infrastructure, and hydrogen production more attractive. At the same time, the **SWIM scheme** supports market development by providing financial assistance to consortia investing in hydrogen refuelling stations and hydrogen-powered vehicles. Together, these instruments drive both demand creation and risk reduction: the 2 PJ target provides long-term offtake certainty, while SWIM accelerates early-stage investments, enabling the hydrogen value chain to scale up more rapidly and helping to reduce costs over time.

### *Dutch SWIM subsidy scheme*

*The Dutch SWIM scheme supports hydrogen mobility by financing consortia combining hydrogen refuelling stations and vehicle fleets, addressing the chicken-and-egg problem between infrastructure and demand.*
*For the 2026 round, €45 million was available. Support can cover up to 40% of station investment costs and up to 80% of the additional cost of hydrogen vehicles compared with conventional alternatives. Projects must generate sufficient hydrogen demand, with a strong focus on heavy-duty transport.*

In **France**, while the national hydrogen strategy of 2020 had defined the development of hydrogen in heavy and intensive mobility as one of its three priorities, the revised national hydrogen strategy adopted in 2025 focuses more on industrial uses of hydrogen and merely acknowledges that in some specific use cases, in particular for heavy and intensive mobility, hydrogen road mobility can be useful and play a complementary role to battery electric vehicles. Existing hydrogen road mobility ecosystems have primarily been developed through funding by the Hydrogen Territorial Ecosystems calls issued by the Agency for Ecological Transition ADEME between 2019 and 2023 and by regional governments. As of July 2026, there is **no more national support scheme** for the purchase of hydrogen vehicles and France has not yet transposed the transport provisions of the RED III Directive, which would allow to lower the cost of renewable and low-carbon hydrogen for road transport.

## Description of projects

Various companies are developing hydrogen refueling infrastructure in the Netherlands and France. 39 refueling stations with unrestricted access are operational in France (and 8 with restricted access that can become publicly accessible) and 27 in the Netherlands, al as of July 2026. Fountain Fuel, Air Products,

Holthausen and Van Kessel are notable fuel station developers in the Netherlands, and Resato is a market leading technology provider. TEAL Mobility is active in both countries.

HYmpulsion, Hyliko, Qair and Hysetco are with TEAL Mobility the main fuel station developers and operators in France. Together with Fountain Fuel and three other European HRS developers and operators, HYmpulsion and TEAL Mobility are founding members of the European H2 Infra Alliance. France has 3 HRS equipment manufacturers: ATAWEY (50 installed HRS in France and Europe), Hydrogen Refueling Solutions (HRS - 30 installed stations) and MADIC. Hyliko offers its customers an integrated package of hydrogen and trucks as a service. The following French companies (non-exhaustive list) are also active in the hydrogen road mobility sector: AMPERE (Renault Group), Dangel, Efficient Hydrogen Motors (EHM), FORVIA, GCK Mobility, H24, Ligier, Michelin, OPmobility, Phinia, RH2, Stellantis.

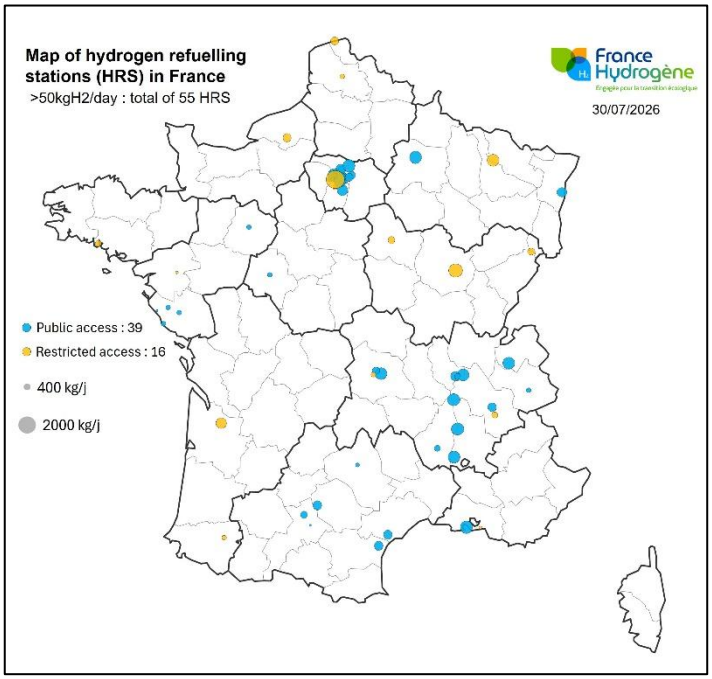



*Figure 1. Map of HRS in France - France Hydrogène - July 2026*

## Recommendations

- **Scaling hydrogen trucks and refuelling infrastructure.** Coverage of the hydrogen fueling network needs to expand, with a key focus on the TEN-T North Sea-Rhine-Mediterranean corridor between the Netherlands and France. A community of hydrogen suppliers, fuelling station operators, truck OEMs and logistics companies should be organised around a common goal of operating a set amount of hydrogen trucks and a network of new and existing refueling stations, allowing hydrogen trucks to seamlessly travel between Groningen and Marseille.

- **Sharing best practices on support schemes and vehicle uptake.** Under this partnership, Dutch experiences with the SWIM scheme should be shared with the French hydrogen community. France should create an equivalent for the SWIM scheme, with a separate target for direct use of hydrogen under its RED3 Transport target, and a scheme especially focused on supporting consortia of fueling station operators (ensuring infrastructure) and logistics companies (ensuring offtake of hydrogen).




*Figure 2. North Sea-Rhine-Mediterranean corridor*

# eSAF

## Context

Since 2023, the European Union has established a supportive regulatory framework for the development of synthetic aviation fuel projects through the ReFuelEU Aviation Regulation and its progressively increasing blending mandates.

ReFuelEU Aviation provides a particularly important precedent for demand-side policy. By creating a predictable and progressively expanding market for synthetic aviation fuels, the Regulation gives project developers greater visibility over future demand and improves the conditions for long-term investment decisions. It demonstrates how binding demand targets can help structure emerging markets, reduce offtake uncertainty and support the development of new industrial projects.

## Description of projects

**France** has developed particularly strong momentum, supported by this regulated market and the characteristics of its low-carbon electricity mix. The country's **twelve announced projects** currently form the largest project pipeline in Europe and the second largest worldwide. Together, they could reach an annual production capacity of around 800 kt by 2030 – approximately four times France's demand resulting from the European mandates in 2030 and almost twice its expected mandated demand in 2035.

**The Netherlands** is also building a strong e-SAF ecosystem, leveraging its strategic aviation and logistics hubs. ENGIE is supporting the development of an e-SAF value chain linked to Groningen Airport Eelde and Schiphol Airport, while opportunities for cooperation with Air France-KLM are being explored through existing sustainable transport initiatives. The Power2X and Advario e-SAF project in the Port of Rotterdam aims to supply sustainable aviation fuel to European aviation markets. Rotterdam The Hague Airport is actively positioning itself as a testbed and launch platform for sustainable aviation solutions, further strengthening the Dutch contribution to a future Franco-Dutch e-SAF value chain.

France and the Netherlands are therefore well positioned to develop competitive European e-SAF value chains and contribute substantially to the achievement of the ReFuelEU Aviation targets.

## Description of policy

However, project developers are currently struggling to reach final investment decisions because producers and buyers operate under fundamentally different time horizons. Producers need long-term certainty regarding both sales volumes and prices to finance capital-intensive facilities. Airlines and fuel suppliers, by contrast, are generally reluctant to enter into long-term offtake agreements, given uncertainty over future prices, regulatory conditions and their own fuel requirements.

**A double-sided auction mechanism could bridge this gap.** Drawing on the approach developed in Germany, such a mechanism could also be introduced in France and the Netherlands to reconcile the respective needs of producers and consumers.

On the production side, a competitive auction would award long-term contracts of around 10 to 15 years, guaranteeing an annual purchase volume and a fixed or indexed selling price. This revenue certainty would enable successful projects to reach FID, secure financing and construct their production facilities, with first deliveries typically beginning three to four years later.

On the demand side, the contracted volumes would be regularly resold through shorter-term auctions covering periods of one to three years, which could be renewed. Fuel suppliers and airlines willing to offer

the highest price would secure the available volumes. This would provide consumers with access to e-SAF without requiring them to commit for the full duration of the producer contract.

A public or designated intermediary would connect the two sides of the mechanism. Where the price obtained through the offtake auction is below the price guaranteed to the producer, the mechanism would cover the difference. Conversely, where the resale price exceeds the guaranteed production price, no public support would be required, and the resulting surplus could be returned to the mechanism or used to support subsequent projects.

Initial funding could primarily come from additional EU ETS Aviation revenues generated by the phase-out of free allowances, potentially complemented by an adjustable sectoral contribution. This approach would limit pressure on public finances while ensuring that support remains closely linked to the aviation sector's decarbonisation.

## Recommendation

France and the Netherlands should introduce coordinated national double-sided auction mechanisms for e-SAF, with the possibility of progressively developing a joint or European framework. Such mechanisms would unlock final investment decisions, bring first-of-a-kind projects to market and accelerate the production volumes required to meet the ReFuelEU Aviation objectives.

# General policy recommendations

## Creation of clean lead markets

The creation of clean lead markets is essential to provide hydrogen producers and investors with sufficient long-term visibility on demand and offtake. Priority should be given to sectors where renewable and low-carbon hydrogen is indispensable to decarbonization and where alternative technological pathways remain limited, notably primary steelmaking or fertilizer production. We therefore advocate for the progressive introduction of demand-side obligations targeting products manufactured with clean hydrogen or hydrogen-derived carriers, such as renewable e-ammonia, e-methanol and synthetic fuels. These obligations could take the form of minimum incorporation requirements, product quotas or public and private procurement criteria, supported by robust certification and traceability rules.

ReFuelEU Aviation already provides a strong precedent for this approach, by establishing progressively increasing minimum shares for sustainable and synthetic aviation fuels and thereby creating a predictable demand framework capable of supporting investment in new production capacities. By creating a predictable market for these products, such instruments would enable producers to secure long-term offtake agreements, reach final investment decisions and reduce financing costs. They would also facilitate the gradual scaling-up of production capacities, generate economies of scale and progressively narrow the cost gap with fossil-based alternatives.

Clean lead markets should therefore be designed as part of a coherent industrial policy framework that simultaneously supports hydrogen production, protects European manufacturing capacity and maintains the competitiveness of energy-intensive industries. Their implementation should follow a clear and gradual trajectory, aligned with the availability of domestic production and infrastructure, while ensuring equivalent requirements for imported products to prevent carbon leakage and preserve a level playing field.

## Revision of the DA RFNBO

In the context of the targeted revision of the RFNBO delegated acts, France Hydrogène and NLHydrogen argue that such a revision must be adopted quickly in order not to create a new period of uncertainty and ultimately block the entire industrial ecosystem. The current targeted review may alleviate some concerns of the sector, but the timeframes of the current revision process are unclear, which is creating regulatory uncertainty.

We therefore call on the European Commission to publish its proposal for the targeted review without further delay, establish a clear and reliable timetable for the remaining process, and conclude the revision as swiftly as possible, with the firm objective of submitting the final proposal before end of the year.

## RED IV

France Hydrogène and NLHydrogen argue that we need to keep targets and mandates for hydrogen offtake in the upcoming EU Renewable Energy Directive 4. In line with the statement shared by 170 industry parties in September 2026, we are asking that the Commission continue to engage with the hydrogen industry and Member States to ensure industry targets are achievable and enable market ramp up.

The clean lead markets approach mentioned above may provide a way to create a scaleup of hydrogen markets while maintaining European industrial competitiveness. Dismantling targets and mandates, however, would remove the basis on which FIDs in production capacity and infrastructure have already been taken.