Cleantech for Iberia

Unlocking Hydrogen Investment through Ambitious RED III Implementation in Spain

Creating a regulatory framework to crystallize offtakes and scale RFNBO production

Spain has a **unique opportunity** to position itself at the forefront of Europe's green industrial transition. With one of the most competitive green hydrogen costs globally, the country is well placed to attract industrial projects, scale up innovative solutions, and become a **leader in RFNBO** production and export.

However, despite this strategic advantage, the current draft of Spain's RED III transposition risks falling short of creating the market visibility and regulatory certainty needed to **secure investments** and final investment decisions (FIDs) for industrial-scale hydrogen projects.

Why the current proposal falls short

Spain's proposed targets—especially when applying multipliers[1]—only represent a **real RFNBO demand of 1.7%[2] by 2030**, far below what is needed to support projects that have already secured subsidies and are awaiting market visibility. For example:

- The real demand triggered in 2030 would only support **<1.6 GW[3]** of electrolysis capacity.
- **At least 5.5 GW** of capacity is required to absorb the pipeline of projects already subsidized in Spain.[4]g
- The lack of established penalty for non-compliance makes it difficult to determine the green premium of renewable hydrogen in Spain. While the green premium refers to the price gap between renewable and fossil-based hydrogen, a clear and predictable penalty is essential to give that premium credibility, ensuring that obligated parties are incentivized to pay it, and that developers can reflect it in long-term offtake contracts.

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[1] Under current EU rules, each unit of RFNBO and advanced biofuel used in transport can be counted twice (2x multiplier), meaning that the official figures significantly overstate actual physical demand. While multipliers are relevant and should apply when RFNBO competes with other compliance options (e.g. against first generation biofuels), for example, in the context of the overall renewable energy target in transport (Article 25.1 (a), their application to specific RFNBO / advanced biofuel obligations (Article 25.1(b) has no legitimate policy objective and should be avoided

[2] Proportion of the actual RFNBO energy quantity to be supplied per year (RED + ReFuel EU Aviation) within the total energy to be supplied to the transport sector (maritime, aviation and road) included.

[3] Assuming 6,000 full load hours and 70% efficiency.

[4] Estimated 5.5 GW of electrolysis capacity refers to the pipeline of hydrogen projects that have already secured public support in Spain, including those funded under the H2 Pioneros I call (€250 million awarded to 19 projects, equivalent to ~400 MW), as well as upcoming support lines under the updated PERTE ERHA framework (up to €1.5 billion for renewable hydrogen and related value chains). Assuming an average CAPEX of €700,000/MW, this support could enable over 2 GW of additional capacity. Combined with projects in advanced preparation, a conservative estimate of 5.5 GW reflects the total scale requiring market visibility to reach FID.
Source: MITECO

- For comparison, Germany's plan mandates **1.2% RFNBO in transport by 2030** (without multipliers), increasing to **8% by 2040**, with **GHG reduction targets of 25% by 2030** and **penalties of €120/GJ (€14.4/kg)** to ensure compliance.

Recommendations for a strong and bankable framework

To trigger sufficient offtake and unlock project development, Spain should consider the following adjustments:

1. **Express RFNBO sub-targets in real terms (excluding multipliers)**
    - At least **6% real RFNBO target by 2030** is needed to trigger demand for subsidized projects.
    - Interim milestones should include **0.02% in 2026, 0.8% in 2027, 2% in 2028, 3% in 2029** (all in real terms).
2. **Transposition of clear demand quotas for industry**
    - With clear demand quotes by sector Spain can lead by example. This means aiming for high concrete RFNBO quotas in transport, aviation, shipping, refineries and other industries. This should include the definition of refinery demand quota – 1% RFNBO hydrogen by 2030.
3. **Apply multipliers only when justified**
    - Limit use of 2x multipliers to Article 25.1(a) (RED) GHG reduction targets, not to Articles 25.1(b) (RED) - RFNBO and Advanced Biofuels sub-mandates[5] , to avoid distorting real demand and undermining public objectives.
4. **Introduce a high and predictable penalty for non-compliance**
    - A clear, material penalty (e.g., equivalent to at least €8–9/kg) is essential to de-risk offtake contracts and enable financing.
    - Obligated parties should (partly) be allowed to avoid the penalty if they make-up the missed targets in the following years.
5. **Ensure non-obligated parties can generate RFNBO certificates**
    - This would allow supply from merchant projects and create a more dynamic market.
6. **Provide long-term visibility beyond 2030**
    - A trajectory up to **2035 or 2040**, as done in Germany, is needed to align with asset lifetimes and scale-up investment.

[5] – Article 10 and 12 of the draft Royal Decree.

7. **Recognize E-SAF mandates in Article 5**

    - SAF is already recognized, but mandates for E-SAF should also be explicitly supported to unlock investment in synthetic aviation fuels.

A no-regret move for Spain

Higher real targets will not only create certainty for investors, but will also **support the utilization of the Enagás hydrogen backbone** and **strengthen Spain's competitive edge** in clean fuel production:

- Compliance costs for Spanish fuel suppliers are among the lowest in Europe (e.g., €0.011–€0.03/liter), allowing **cost pass-through** and minimal end-user impact.

- A stronger national mandate means Spain could **export compliance certificates** to other countries, turning regulation into a market opportunity.

Conclusion

Spain has the ingredients to lead. But without a stronger RED III transposition, the risk is a delay in investment decisions, a weakened project pipeline, and underutilization of state support already granted. A more ambitious and technically sound regulatory framework is essential to translate strategy into market reality.

Cleantech for Iberia represents the voice of investors, innovators, universities, and pioneering incubators across the Iberian Peninsula that develop, implement, and invest in innovative clean technologies (cleantech). The coalition's mission is to build bridges between the cleantech community and policymakers in order to transform the Iberian Peninsula into an industrial leader in the cleantech sector in Europe.