



Developing a Logistic Pre-Feed for Waste to Fuel in Morocco

PROJECT FACTS

Duration: May 2026- March 2027

Country: Morocco

Partners: Synhelion SA

Synhelion is a cleantech pioneer founded in 2016. Its mission is to replace fossil fuels and defossilise the transportation sector. The company has validated its technology at industrial scale and has been producing renewable synthetic fuels in Germany since 2024. It is now preparing for global rollout.

Outputs:

- **Port Pre-FEED Study:** A technical engineering plan outlining harbour infrastructure requirements, storage assets, and necessary investments in targeted regions
- **National Biomass Supply & Cost Assessment:** An in-depth study identifying regional availability, commercial pricing, and regulatory gaps for centralized organic waste.
- **Grid Integration Handbook:** A technical manual analysing optimal grid connection locations ("sweet spots") and evaluating off-site green Power Purchase Agreement (PPA) options.



PROJECT OVERVIEW

The Public-Private Partnership (PPP) focuses on the logistical pre-FEED phase for Synhelion's pioneering renewable fuel facility in Morocco. As Europe's demand for **Sustainable Aviation Fuel (SAF)** surges, Morocco serves as a strategic supply hub due to its proximity and renewable energy potential. Unlike classic green hydrogen projects that rely on water electrolysis, Synhelion's unique proprietary technology uses **high-temperature heat from renewable electricity to reform biogas from certified biogenic waste into high-quality syngas**. This process establishes a commercial, market-priced incentive for waste treatment and circular economy in Morocco while preparing the project for commercial upscaling.

OBJECTIVES & EXPECTED RESULTS

The study aims to de-risk Morocco's first commercial-scale, **non-electrolyser Power-to-X facility** by connecting local organic waste streams to international sustainable fuel markets. This partnership builds a commercially viable supply chain that aligns private innovation with national environmental strategies, unlocking new economic opportunities for regional development beyond traditional green energy hubs;

- **Logistical De-risking:** Map out the volumes, commercial viability, and collection circuits of domestic and imported organic waste streams across Morocco to secure a resilient supply chain.
- **Port Optimization:** Evaluate the operational capacities and required infrastructure investments at targeted Moroccan ports for handling biomass and exporting liquid synthetic fuels.
- **Grid Integration:** Define the technical parameters and identify ideal connection points to safely link an industrial facility with highly fluctuating power demands to the national electrical grid.
- **Policy Activation:** Provide a concrete, large-scale industrial application for Morocco's National Biomass Strategy, serving as a replicable blueprint for the MENA region.
- **Socio-Economic Value:** Lay the groundwork to create direct and indirect local jobs, driving industrial innovation and reducing the country's energy import dependency.

ABOUT H2UPPP

H2Uppp paves the way for companies to develop the global green hydrogen market through project identification, project development, support and trade.

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