Haffner Energy launches its hydrogen production, testing and training center in Champagne, France

Designed to operate continuously for 8,000 hours/year, the site will produce 120 metric tonnes of H2/year, contributing to decarbonizing mobility and industry.

Haffner Energy's center of hydrogen production, testing and training in Vitry-Marolles industrial zone, Marne County.

VITRY-LE-FRANçOIS, FRANCE, November 22, 2024 / EINPresswire.com/ -- Inaugurated today, Haffner Energy's hydrogen production, testing and training center is about to start producing renewable hydrogen using its patented biomass and organic waste thermolysis process. The project, a laureate of the France 2030 and Territoires d'industrie programs, enjoys substantial French public funding (over 1 million euros to date).

The site is a showcase for the company's know-how and a strategic tool for its commercial and industrial development. It will also enable Haffner Energy to enjoy a new income stream by selling the hydrogen produced, to perform tests for customers on all types of biomass, and to train them.

After a year spent setting up the site and assembling the equipment, Haffner Energy’s center is now equipped with new-generation, standardized industrial production equipment. Designed to operate continuously for 8,000 hours a year, it entered the renewable gas (syngas) production phase last June (see June 20, 2024 press release). Hydrogen production kick-off is imminent.

Located in Marolles Champagne, just a stone’s throw from the company’s headquarters in Vitry-le-François (Marne County), this site is going to enable Haffner Energy to offer its customers and prospects a fully dedicated technological, industrial, and commercial showcase. As part of the

site's operations, mobility-grade hydrogen will be produced and marketed at the rate of 15 kg/hour, or almost 120 metric tonnes per year, which is the equivalent of 12 million kilometers driven by hydrogen-powered vehicles. This will contribute to decarbonizing mobility and industry, with green hydrogen and biochar (a carbon sink) combined causing 2,400 tonnes of CO2 per year being avoided or captured.

In addition to producing competitive energy, Haffner Energy's HYNOCA®, SYNOCA® and SAFNOCA® solutions are suitable for all types of biomass and organic waste – a major unique differentiation. Agricultural residues, organic sludge, animal manure, and even residual household waste, can all be processed without difficulty. This means inputs are more secure, the risk of conflicts of use is eliminated or greatly reduced, the cost of primary energy is lowered, and bankability and therefore project financing are greatly facilitated.

Part of the thermolysis module that converts residual biomass and organic waste into renewable gas and biocarbon (or biochar).

“This site seemingly is the world's first unit ever built for the continuous production of hydrogen from solid biomass! Our customers have been looking forward to it as much as we have. It is going to provide a tremendous boost to order intakes: visits from customers and partners from a dozen countries and four continents have already taken place or are planned between early November and Christmas. This site makes all the difference,” says Philippe Haffner, Co-founder and CEO of Haffner Energy.

> Our Region is proud to support Haffner Energy in this exemplary adventure, which makes our Region a laboratory for ideas & concrete action to meet the ecological and industrial challenges of our time.”
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> *Franck Leroy, President of Grand Est Region, France*

“Marolles presents the latest version of our renewable gas and hydrogen production modules. The cutting-edge equipment and the attention paid by our field teams to constantly improving the quality and performance of our processes enable us to demonstrate to the world the performance of a technology that has already been on the market for three years”, says Marc Haffner, Co-founder, Deputy CEO and Chief Technology Officer of Haffner Energy.

Marolles, a showcase for Haffner Energy's expertise

A showroom for Haffner Energy's know-how, the site is designed to present a wide range of

Haffner Energy's solutions: production of “super green” hydrogen and gases, co-production of electricity, production and/or gasification of biocarbon and/or biochar. The syngas produced will also meet the specifications required for the production of SAF and methanol.

The first centerpiece of the site is the new-generation thermolysis module, a state-of-the-art, standardized, patented equipment that can transform all types of biomass into renewable syngas, together with its solid co-product: biocarbon (or biochar). The site also includes a TEPC (Treatement Epuration Purification Compression) module to convert syngas into mobility-grade hydrogen, as well as the latest technology created by Haffner Energy: Gasiliner®.

The second key component, Gasiliner® is a proprietary piece of equipment which gasifies biocarbon, significantly increasing syngas production. All the carbon is gasified, while only inert ash is removed from the process. Gasiliner® has the unique property of being compatible with all types of biomass, especially those whose ash is pasty and sticky due to a low melting temperature (as is the case with most agricultural residues). It provides a strong competitive advantage for SAF and e-SAF projects, as evidenced by the recent partnership signed with Icelandic water electrolysis hydrogen and sustainable e-fuel project developer IðunnH2 (see September 2, 2024 press release). Gasiliner® will also provide a competitive and relevant solution to create value from biocarbon when no other valuable use for it is available.

A wealth of public support and funding for the project

This project was made possible thanks to the support of local elected representatives and a number of public grants:
• 88,655 euros from the municipality federation of Vitry, Champagne & Der, in the form of real-estate investment aid for the acquisition of the Marolles land (1.5 hectares or 3.7 acres);
• 45,351 euros via the Fonds National pour l’Archéologie Préventive (FNAP) for archaeological excavations operated by INRAP;
• 500,000 euros via the France 2030 Regionalized program, co-financed by the French government and Grand Est Region and operated by Bpifrance;
• 400,000 euros via the “Fonds Vert - Territoires d’industrie en transition écologique” operated by the ADEME (France’s Agency for Ecological Transition).

“Haffner Energy is fully integrated into the government’s reindustrialization approach. It is for this reason that the French government is supporting its development and dynamics. The Haffner Energy testing and training center which is inaugurated today opens a new phase in the development of this local company. It is a testimony to the dynamism of this innovative enterprise whose activity is a driving force for the Region”, says Henri Prévost, Marne County Prefect.

"Grand Est Region is proud to support Haffner Energy in this exemplary adventure, which makes our Region a laboratory for ideas and concrete action to meet the ecological and industrial challenges of our time. Together, we are shaping the foundations of an industrial model for the

future, combining economic performance with respect for our planet", states Franck Leroy, President of Grand Est Region.

Laetitia Mailhes
Haffner Energy
607129676 ext.
email us here
Visit us on social media:
X
LinkedIn
