



December 5, 2023

45-8 ENERGY and Storengy: a solid and unprecedented collaboration for the emergence of a native hydrogen industry in south-west of France.

In March 2023, a joint application for an exploration license was filed by 45-8 ENERGY, company specialized in the exploration and production of industrial gases, and Storengy, a key player in the exploration and exploitation of the subsurface and in renewable gases. Currently under review, the exploration license concerns native hydrogen and covers an area of 266km² in the Pyrénées-Atlantiques district, in the Nouvelle-Aquitaine region of France.

The emergence of a native hydrogen industry with the Grand Rieu project

Bibliographical research and preliminary field studies have been carried out between 2021 and 2022 as part of a research project called H₂NA. Partly financed by the Nouvelle-Aquitaine region, and in partnership with BRGM, UPPA, 45-8 ENERGY, ENGIE, Storengy and CVA Group, the H₂NA project confirmed the sector's potential for native hydrogen.

45-8 ENERGY, through its subsidiary 45-8 Grand Rieu, and Storengy have jointly submitted an exploration license application, named Grand Rieu, in order to deepen geological knowledge of the area and confirm the potential for native hydrogen. The grant of this license, and the subsequent validation of our hypotheses, would enable us to envisage medium-term production of this low-carbon hydrogen. Such production would encourage the regional use of hydrogen as a low-carbon energy source, and contribute to the energy transition in the south-west of France.

Native hydrogen: a complementary solution to the low-carbon hydrogen mix

Known as native or natural hydrogen, this resource is produced naturally by the planet, in the subsurface, and *"its formation requires no critical materials, no anthropogenic energy and has no impact on available water resources"*, explains Benoît Hauville, co-founder and Managing Director of 45-8 ENERGY.

As a totally carbon-free resource, the production of native hydrogen makes it possible to produce low-cost, low-carbon hydrogen, and to participate in the low-carbon hydrogen mix.

A solid collaboration between two major players in native hydrogen

For the first time, 45-8 ENERGY and Storengy have joined forces to explore a low-carbon resource at the heart of today's energy and environmental challenges.

45-8 ENERGY is the operator of the Grand Rieu permit. As such, the company is coordinating all activities within this license and will be carrying out studies and work.

"This collaboration is very good news. Our business expertise and ambitions match those of Storengy, promising a bright future for this partnership!" emphasizes Nicolas Pélissier, co-founder and President of 45-8 ENERGY.

As a partner, Storengy is contributing its technical expertise to this exploratory phase, assisting with the studies and work that will be carried out.

“At Storengy, it seemed natural to collaborate with the 45-8 ENERGY teams on this license. With their innovative geological approach and our years of experience, we are confident that we will be able to unlock the full potential of the selected zone,” adds Olivier Lhote, Director of Native Hydrogen Projects at Storengy.

What are the next steps?

The application for the exploration license is currently under review. The competitive bidding process for the license took place from September 1 to September 30, 2023, and no other license applications were received. Instruction is continuing, first at regional level and then at national level. The next public stage will be the public consultation, which will take place in a few weeks' time under the aegis of the French Ministry of Ecological Transition.

If the application goes ahead, 45-8 ENERGY and Storengy plan to supplement the existing data with geological and geophysical acquisitions in the area, indirect acquisitions that will have no impact on the environment or local residents, to confirm the area's native hydrogen potential.

About 45-8 ENERGY

As pioneer in Europe, 45-8 ENERGY is the company dedicated to the exploration and production of eco-responsible, strategic industrial gases that are valorized in short circuits: native hydrogen and helium, as well as the resources that can be associated with them.

45-8 ENERGY's ambition is to become the European leader in native hydrogen and helium. In order to achieve this goal, the company relies on three pillars:

- Co-development of resources;
- Extracting and distributing resources to strategic local markets through production as close as possible to European consumers;
- Reducing the resource supply chain, by eliminating costly steps with a high environmental impact.

45-8 ENERGY is active in the natural hydrogen ecosystem. Its activities have led to it being one of the first winners of the H40 Index, created by MEDEF International and France Hydrogène, which lists the most promising French low-carbon hydrogen start-ups and scale-ups. The company is also behind the earth2 initiative, which brings together some 50 subsurface hydrogen players.

About Storengy

Storengy, an ENGIE subsidiary, is one of the world leaders in subsurface natural gas storage. The company operates 21 natural gas storage sites in Germany and the United Kingdom. Storengy is also a key player in renewable gases. With 70 years' experience in subsurface exploration and exploitation, and in response to the current energy challenges of decarbonization and sovereignty, Storengy is today mobilizing its skills to develop hydrogen storage infrastructures, and natural hydrogen exploration with research and development projects initiated in 2016.

As a player involved in the energy transition, Storengy is developing its renewable gas storage activities with a triple objective:

- An environmental objective by reducing the carbon footprint linked to energy consumption;
- A social objective by supporting the surrounding economic activities and local employment;
- A societal objective by promoting links between local residents, representatives of public institutions and industry.