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45-8 ENERGY LAUNCHES RECYCL'He, THE FIRST MOBILE HELIUM RECYCLING UNIT IN EUROPE.

45-8 ENERGY, a European leader in native helium exploration and production, announces the commercial launch of RECYCL'He, a **major innovation in helium recycling**. This first of its kind mobile unit marks a first in Western Europe and provides a direct solution to the challenges associated with the supply of this critical resource.



Mobile and flexible, this innovative solution is now hitting the road. Its destination: **helium to be recovered and recycled across Western Europe**. And it was in the heart of Paris that RECYCL'He completed its first recovery of degraded helium during the deflation of, what is now probably, the world's most famous balloon. This is a significant opportunity for the company's latest innovation.



RECYCL'HE: A TURNKEY SOLUTION

The solution is designed to meet all the needs of helium-consuming industries.

How does it work? 45-8 ENERGY goes directly to the customer's site to recover the degraded helium. It is purchased from the customer, generating additional income. It is then purified and conditioned at one of 45-8 ENERGY's dedicated sites. Finally, the purified helium is reintroduced to the market.

Helium recycling is a complex subject for consumer companies, not least because of the technical challenges involved. Indeed, the recovery of this gas takes place in specific contexts where recovery systems are installed. However, these systems are very costly and require substantial installations. The RECYCL'He solution is therefore aimed at all industries lacking the technical and/or financial resources to install such a system. The mobility of RECYCL'He makes it easy for manufacturers to opt for recycling.

Beyond the technical aspect, opting for this solution enables helium consumers to reduce their carbon footprint. A complete life cycle analysis of the device has been carried out, according to standards 14040 and 14044, demonstrating the reduction in carbon impact for customers using RECYCL'He.

HELIUM SUPPLY UNDER PRESSURE AND RECYCLING STILL MARGINAL

It's a fact: 100% of the helium consumed in Western Europe is imported, mainly from the USA, Qatar and Algeria. A rare and strategic resource, helium is essential to many industries (medical, advanced electronics, lifting, recycling of strategic metals, etc.). Yet the helium market remains extremely tight, mainly due to the uneven distribution of production sites in the world, complex transport and storage, and constantly rising prices.

Recycling this resource would appear to be a first step for limiting tension on the helium market, by providing a larger volume and ensuring its long-term presence on European soil. However, recycling of this resource is still underdeveloped. It is currently estimated at 1%.

AN INNOVATIVE RESPONSE TO SOCIETAL AND ENVIRONMENTAL CHALLENGES

RECYCL'He is much more than just a technological innovation: it's an essential step towards a helium circular economy. By encouraging the reuse of existing resources, RECYCL'He reduces dependence on sources of native helium from outside Europe, while offering a sustainable solution to consumer industries in need of a secure supply.

Aware of the challenges posed by helium rarity, the European Union adopted the CRM Act on March 16, 2024, setting a target of 25% of annual consumption of critical raw materials, including helium, to come from recycling by 2030. RECYCL'He is fully in line with this approach, offering a concrete response to achieving these ambitious targets and strengthening European sovereignty in terms of critical resources.

For 45-8 ENERGY, this recycling project is fully in line with its ambition to improve the entire helium value chain, from exploration of the resource to delivery to the end customer... now including helium recycling.

A PROJECT SUPPORTED BY THE GRAND EST REGION AND THE FRENCH GOVERNMENT

The RECYCL'He solution is one of the initiatives supported by the French government and the Grand Est region, as part of France 2030. The project has received €439,000 in funding, demonstrating the region's commitment to innovation and its commitment to the ecological transition.



A PROPOS DE 45-8 ENERGY

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

45-8 ENERGY has made its mark on the European helium and natural hydrogen market, with several exploration permits filed and obtained in France, Germany and Kosovo. The company is also starting to produce helium for the first time, with the inauguration of the first helium pilot production unit in September 2024 in the Nièvre region of France. A first in Western Europe!

Beyond this, the company is committed to the most responsible use of the resource, working in particular to create a helium circular chain thanks to its RECYCL'He technology, a mobile helium recycling unit.

The deployment of these activities and projects is made possible by a multidisciplinary team of 35+ engineers and managers.



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