



NATURAL HYDROGEN...

...IS GENERATED CONTINUOUSLY BY THE EARTH AND CAN FORM LARGE SUBSURFACE ACCUMULATIONS...

...IS DEVELOPED USING EXISTING TECHNOLOGY...

...IS THE LOWEST-CARBON SOURCE OF HYDROGEN...

...IS THE LOWEST COST SOURCE OF HYDROGEN...

...IS PRODUCED 24/7 AND REQUIRES NO STORAGE...

...HAS THE LOWEST FOOTPRINT OF ANY SOURCE OF HYDROGEN...

...CAN REVOLUTIONISE THE CLEAN ENERGY TRANSITION

What is natural hydrogen? *The Earth continuously produces natural hydrogen (also called native or gold hydrogen) through several chemical reactions that are mainly related to oxidation of ferrous iron minerals, radiolysis of water, organic matter maturation or outgassing from the mantle.*

Where can it be found? *Observed at multiple locations globally in a variety of geological settings. Typically found in abundance in areas that do not contain hydrocarbons and there are proven occurrences throughout Europe. Historically, it was rare for hydrocarbon exploration wells to record or even measure hydrogen. Consequently, many potentially prolific natural hydrogen areas were overlooked in the search for hydrocarbons. Exploration for natural hydrogen is focused today on areas where ferrous iron (or natural radioactivity) is present and can react with water at depth.*

Natural hydrogen in Aragón. *The natural hydrogen in the Monzón Field was discovered by chance in the 1960's in a well exploring for hydrocarbons in the Ebro Basin. No hydrocarbons were found but the high-quality sandstone reservoir, at a depth of around 3,500m, contained 100% hydrogen which flowed naturally to surface. The field was regarded as a geological curiosity until, almost 60 years later, it is the site of Europe's first natural hydrogen project. The Monzón Field is expected to produce 1.1 million tonnes of hydrogen during its 20+ year production life and there are multiple look-alike structures nearby which are estimated to contain an additional 10 million tonnes of hydrogen reserves.*