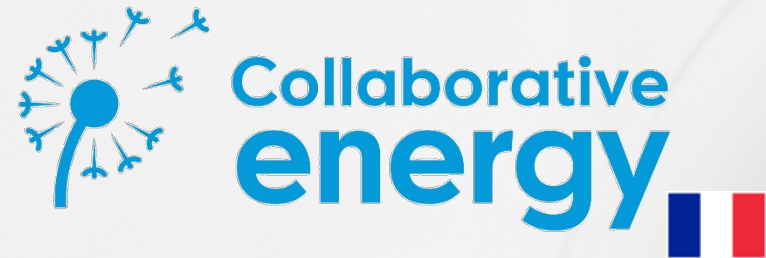


# OSH2S

Open source smart hydrogen sensor for exploration and storage

by



OSH2S proposal is to develop an industrial-grade hydrogen monitoring device based on a far more robust, more reliable, more efficient and less expensive sensor: the metal insulated semiconductor (MIS). The MIS sensor has proved its reliability in many studies and in the mockup that has been built (handheld device to be used by an operator), and it appears as a capacitor which capacitance change according to the gas absorbed by metal top electrode. The main objective is to develop and test a simple functional demo/pilot with all the major features of the product/service/solution in a production environment. The project will address exploration and storage challenges and needs of the raw materials and mining value chain while focusing on innovative technologies.

## Vertical sector addressed

- Energy & Signal Processing

## Challenges tackled by SMEs

- New value chain
- Environmental footprint
- Sustainable sourcing and circular economy

## Key actions addressed

- KA 1
- KA 7

*MINE-Demo scheme*

