

# HYFLEXPOWER

## The world's first integrated power-to-X-to-power hydrogen gas turbine demonstrator

HYFLEXPOWER will be the first demonstration of a fully integrated Power-to-H<sub>2</sub>-to-Power industrial scale power plant including an advanced high-hydrogen dry-low emissions gas turbine. The project will update and enhance an Engie Solutions operated thermal power plant including a Centrax packaged Siemens SGT-400 gas turbine. It will include the integration of a Siemens electrolyser to generate green hydrogen from excess renewable energy and necessary storage capacity. The SGT-400 gas turbine will be upgraded to convert the stored hydrogen into electrical and thermal energy. The final goal is a validation with up to 100% H<sub>2</sub>, demonstrating carbon-free energy production from stored excess renewable energy. The concept will be demonstrated at Smurfit Kappa PRF's site – a company specialised in manufacturing recycled paper – in Saillat-sur-Vienne, France.

The project was launched on 1 May 2020 and will run for four years.

### PARTNERS



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