PROJET

EMIL'HY

USINE DE PRODUCTION
D'HYDROGÈNE RENOUVELABLE ET BAS CARBONE
DANS LE CADRE DE LA TRANSFORMATION ÉNERGÉTIQUE
DE LA CENTRALE ÉMILE HUCHET À SAINT-AVOLD (57)

Concertation garantie par
LA commission nationale du débat public CNDP

CAHIER D'ACTEUR

SHS interest in EMIL'HY project

SHS - STAHL-HOLDING-SAAR

SHS - Stahl-Holding-Saar GmbH & Co. KGaA

SHS – Stahl-Holding-Saar GmbH & Co. KGaA is an management holding that actively assumes tasks for the two steel companies in Saarland, Germany as well as their respective subsidiaries as ROGESA Roheisengesellschaft Saar mbH ("ROGESA"): Aktien-Gesellschaft der Dillinger Hüttenwerke (hereinafter "Dillinger") and Saarstahl Aktiengesellschaft ("Saarstahl"). Dillinger produces heavy plates for sectors such as construction, offshore wind and oil & gas. Saarstahl is a manufacturer of high-quality wire rod and bar for the automotive and general engineering industries. ROGESA operates the blast furnaces at the Dillingen site producing pig iron which is used in the steel plants of Dillinger and Saarstahl. The term "SHS" is used in this document for the mentioned group of companies.

Summary

SHS is committed to decarbonization through an ambitious plan to produce CO2-reduced steel using hydrogen in the direct reduction process, which requires a shift from blast furnace to direct reduction.

SHS aims to integrate renewable hydrogen into its production process as early as 2027. In the first stage, this requires the establishment of hydrogen production facilities along the planned regional MosaHYc network. Therefore, SHS is following with interest the development of hydrogen production projects, among other the Emil'Hy project.

SHS PLANS FOR DECARBONIZATION

SHS has initiated an ambitious plan to produce CO2-reduced steel based on the consumption of renewable and/or low carbon hydrogen in the direct reduction process which initially requires a switch from the blast furnace process to direct reduction. According to the current state of planning, SHS needs a supply of ~25-50 kt RED II/III conform hydrogen in total in 2030 which is expected to ramp up:

- with the anticipated commissioning of the hydrogen network at the end of 2027 with a supply of ~6-12 kt hydrogen per year and
- additional supplies of ~6-12 kt hydrogen each per year starting in the period between 2028-2030.
- In the long term, hydrogen demand is expected to rise to between 120-150 kt

The availability of renewable hydrogen at competitive prices is a basic precondition for this ambitious project to succeed. Local production of hydrogen will therefore be established as a first step together with the local suppliers, before connecting to the European hydrogen network.

The construction of hydrogen production plants along the planned regional MosaHYc network, developed by GRTgaz and Creos, is important for SHS to be able to use hydrogen in the production process as early as 2027 and to meet the long-term demand.

The Emil'Hy project is part of the Grande Region Hydrogen cross-border ecosystem and is aiming to create for a 1st phase a 200 MW renewable hydrogen production plant in the framework of the MosaHYc project between France and Germany. This hydrogen production plant will produce up to 28,000 tons of renewable hydrogen and 50,000 tons of oxygen per year through the water electrolysis process.

SHS confirms its interest to be supplied by several independent H2 producers. SHS will award the suppliers on the basis of procurement procedures. The selection of the contractual partners will be based on objective criteria.

CONCLUSION

Locally produced hydrogen is a key factor for the implementation of SHS's decarbonization roadmap. SHS is therefore following with interest the development of regional hydrogen projects, among others the Emil'Hy project.