



INNOVATION FUND

Deploying innovative net-zero technologies for climate neutrality

HITeUP: Heat up Isover Transition to Electric Under Production

The Innovation Fund is 100% funded by the EU Emissions Trading System

| Project Factsheet

The main objective of the HITeUP project at the Saint-Gobain Italy (SGI) plant at the Vidalengo site is to demonstrate a first-of-a-kind, hybrid curing oven that maximises its electrification and allows for 11% of relative greenhouse gas (GHG) avoidance during the mineral wool process. The HITeUP hybrid curing oven will replace the traditional gas-fired burners with electric heating equipment.

In addition to switching the nature of the energy input, electrification will also allow for the increase of the process's energy efficiency. Whilst electric alternatives to conventional equipment are commercially available, their full integration with the traditional glass wool curing process has never been developed and implemented at the industrial scale. HITeUP technology will then help to move towards net-zero mineral wool production.

COORDINATOR

SAINT-GOBAIN ITALIA SPA

LOCATION

Italy

CATEGORY

Energy intensive industries (EII)

SECTOR

Glass, ceramics construction material

AMOUNT OF INNOVATION FUND GRANT

EUR 1,635,000

EXPECTED GHG EMISSIONS AVOIDANCE

14,965 tonnes CO₂ equivalent

STARTING DATE

01 October, 2023

ENTRY INTO OPERATION DATE

30 June, 2025

FINANCIAL CLOSE DATE

31 August, 2024

** Calculated vs. the 2021-2025 ETS benchmark of 6.84 tCO₂e/tH₂, not taking into account additional carbon abatement due to substitution effects in the H₂ end use application, i.e. conservative estimate.*

The European Union is the world's biggest producer of mineral wool, with a market share of around 35% of total world production. The industry is known for the quality of its products, its capacity for technological innovation, and its skilled labour force. Moreover, mineral wool is a strategic material to minimise heat loss through improved energy efficiency of buildings. However, the production of glass wool is an energy intensive process that emits high amounts of Greenhouse Gases (GHGs), thus negatively impacting the carbon footprint of the construction sector. These emissions particularly relate to natural gas consumption from melting furnaces, fiberizing machines, and curing ovens. The project will

contribute to the European objectives to reduce GHG emissions and is in line with the RePowerEU Plan.

This project is also in line with Saint-Gobain's decarbonisation strategy to implement innovative, first-of-a-kind, net-zero carbon plants by 2030 to reach its 2050 net-zero carbon target. To promote HITEUP, SGI will develop and implement a communication strategy on local and worldwide scales to promote the project's positive environmental and social impacts. Furthermore, the HITEUP technology is easy to transfer, even to existing curing ovens. Once validated, the technology could readily be rolled out throughout the sector.

| Participants

SAINT-GOBAIN ITALIA SPA

Italy