HI4S

CIRCULARITY IN ENERGY INTENSIVE INDUSTRIES

With the contribution of the LIFE Programme of the European Union
LIFE20 CCM/ES/001733

www.hi4s-life.eu

HEAT IT YOURSELF FOR SUSTAINABILITY
CIRCULARITY IN ENERGY INTENSIVE INDUSTRIES

PROJECT OBJECTIVE

LIFE HI4S project aims to build an innovative cost-effective combined heat&electricity production plant **from the waste heat contained in the off-gas of an electrice arc furnace** (EAF) in order to reduce energy input for steel making processes through slag-based thermal energy storage (TES) technologies and energy balance optimization.

THE GOAL IS TO BOOST BOTH ENERGY EFFICIENCY AND STEEL SLAGS REUSE AT ONCE!

LIFE HI4S POSITIVE IMPACTS

REDUCE STEEL SLAG WASTAGE

REDUCE CO_2 EMISSIONS

REDUCE ENERGY CONSUMPTION

LIFE HI4S NUMBERS

8
PARTNERS

2
COUNTRIES INVOLVED

3
YEARS DURATION

2021 07/01
STARTING DATE

LIFE HI4S TECHNOLOGY

High temperature ceramic filtering system for a low cost off-gas heat recovery solution

TES system to turn the variable nature of off-gas heat into homogeneous source of energy

Scrap Dryer to reduce scrap humidity through hot off-gas streams

ORC system powered by exhaust gases and produces electricity by means of a new vector fluid with lower GWP

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