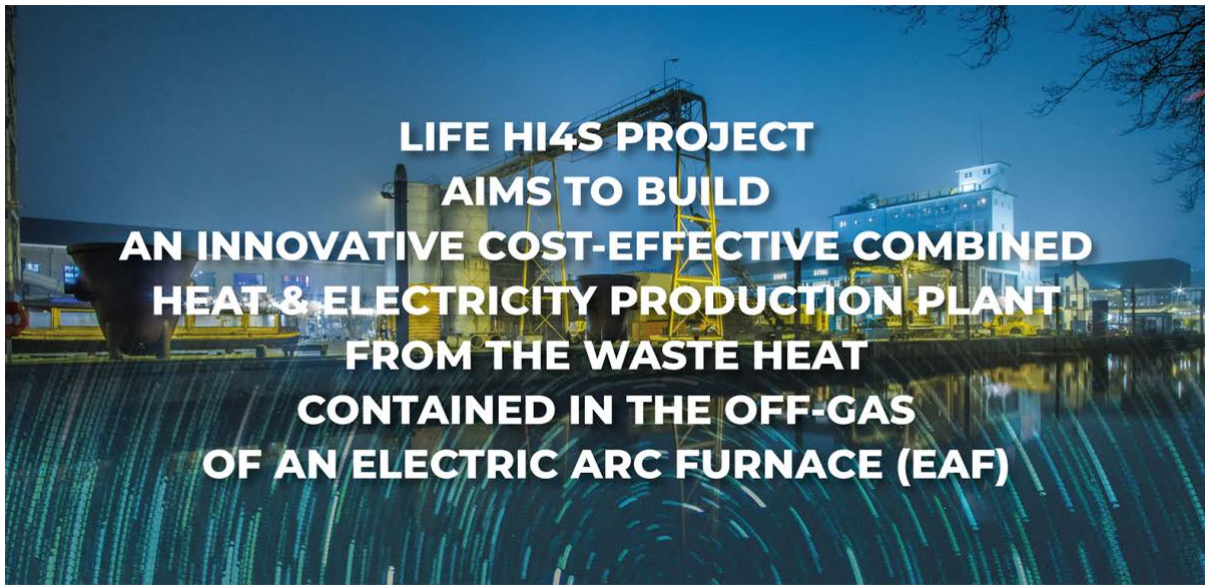




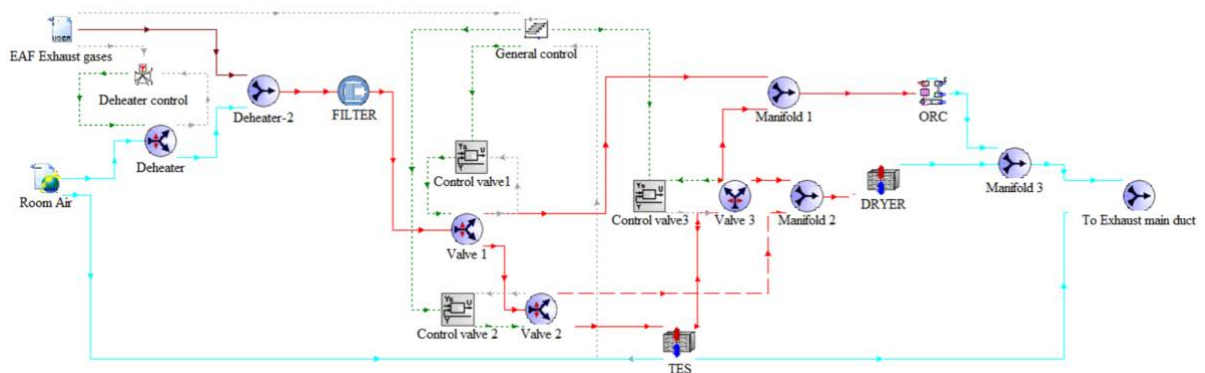
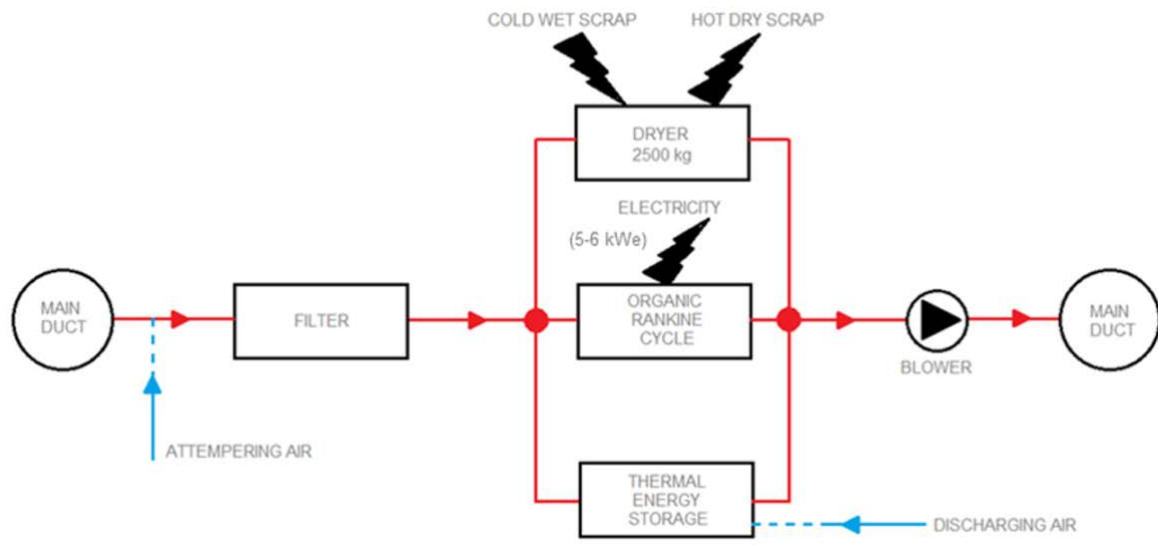
With the contribution of the LIFE programme of the European Union
LIFE20 CCM/ES/001733



The role of modelling activities into LIFE HI4S Project

The success of a waste heat recovery solution is intrinsically linked to the adoption of new cost-effective technologies and to their best design oriented towards an optimal integration into the system which often presents a dynamic environment. This dynamic nature often turns into high engineering design complexity which demands the help of advanced digital tools.

One of the most important activities carried out by CIC energiGUNE researchers within LIFE HI4S project, consists of the components' virtualization and the digital model's development to be used as a virtual testing of the system operation. This activity is leveraged on the great simulation expertise and powerful tools (TRNSYS, ANSYS Fluent) developed by CIC energiGUNE during several research projects in the frame of waste heat recovery. This digital model is required for understanding the behavior of the pilot plant in different conditions, linked to the individual performance of the different components subjected to a variable and dynamic environment. In addition, this response may be used to extract critical data to improve the design of the components, aimed to improve the behavior of the whole system.



The deliverable comprising the development of the digital model is almost ready to be released, where important aspects to optimize the plant operation have been identified, improving the heat recovery capacity significantly.

Finally, during the testing campaign of the pilot plant, the digital model will be validated and then, it will turn into an essential decision-making tool to assess the up-scaling applicability and reproducibility of the technology in other steelworks and industrial sectors without incurring in additional expenses.

Core LIFE HI4S technologies components are ready!



Scrap dryer

After a long and challenging design phase, LIFE HI4S partners are delighted to share that the high temperature ceramic filtering system and the scrap dryer - core components of LIFE HI4S technology - have been successfully manufactured and are ready to be transferred to the pilot plant. The scrap dryer has been developed by the project coordinator CIC energiGUNE, while the partner FIVEMASA oversaw the filtering system assembly.



Filtering system

LIFE HI4S technology concepts presented at METEC & ESTAD 2023

In the framework of LIFE HI4S project, Erika Garitaonandia from the project partner FUNDACIÓN AZTERLAN will participate as a programme speaker to the [METEC & ESTAD 2023](#) event.

METEC is the most important trade fair for metallurgical technology and it is combined with the **6th European Steel Technology and Application Days** organized by the Steel Institute VDEh, with the aim of sharing and updating the

sector about the technological development in order to discuss ideas and applications with the steelmaking and iron stakeholders.



The gathering will take place from the 12th to the 16th of June in Dusseldorf, Germany and our Erika Garitaonandia from AZTERLAN will present the technologies carried out through LIFE HI4S project describing the steel slag characteristics as a Thermal Energy Storage (TES) system, addressing the challenge of mechanical and thermal fatigue of the material.

Third Project Consortium Meeting

On the 30th and 31st of January 2023, LIFE HI4S partners have gathered again for a new project consortium meeting!

All the Spanish partners have travelled to Italy, since LCE (Life Cycle Engineering) gracefully hosted it in Turin, with the meeting taking place in the fascinating [OGR](#) (Officine Grandi Riparazioni) building.

As the second meeting finally held in person, it has represented a great occasion to wrap up activities developed and challenges ahead as the partners approached the second half of LIFE HI4S project development.

After the Consortium meeting, a few project partners took the chance to visit some Italian steel makers in Brescia and Verona as part of the stakeholder consultation activities: the aims of those visits were to have insights from potential LIFE HI4S technology users, collecting information about the processes and new perspectives on development possibilities.

The next meeting is coming soon, the LIFE HI4S partners will meet in mid-July in Durango, hosted by FUNDACIÓN AZTERLAN.



LIFE HI4S EU Project

© Copyright 2023 LIFE HI4S project. All Rights Reserved by LIFE HI4S project.

[Unsubscribe](#) | [Manage your subscription](#) | [View online](#)