

Valorization of iron foundry sands and dust in ceramic tile production process



The main objective of the LIFE FOUNDRYTILE project is to demonstrate the valorization of iron foundry sands and dust in the ceramic tile production process. The innovative character is provided by the utilization of green and chemically bonded foundry dust and sand in tile production replacing natural raw materials, clay (for red firing ceramic products) and sands (for white firing ceramic products).



SIXTH CONSORTIUM MEETING

On the 18th of April 2018, the sixth follow-up meeting of the project was held in Onda (Castellón), at Euroatomizado's facilities.

PROGRESS OF ACTIONS

The meeting began with a general summary of all actions with a view to the completion of the project in August 2018. The consortium reviewed the financial and administrative tasks and then had the opportunity to visit Euroatomizado's facilities.

In terms of technical advances, the tests carried out on a pilot scale in ITC with the compositions of stoneware and red-glazed tiles, have shown positive results regarding to gaseous emissions.



The pilot-scale tests carried out in Euroatomizado with the porcelain stoneware and white-ceramic tile compositions have not shown significant divergences compared to the conventional ones.



Regarding the life cycle analysis of the valorization strategy, improvement was observed in practically all environmental impact categories. Specifically, it should be noted that the reduction of greenhouse gas emissions, due to the reuse of by-products, is equivalent to the transportation of these along 1.288 km. The implementation of the FOUNDRYTILE solutions would imply a decrease in emissions of 21.000 tons CO₂ / year at national sector level.

Regarding D dissemination tasks, the following actions have been carried out:



- Presentation of the project during the Innovative initiatives seminar aimed at promoting the circular economy of foundry sands, on 9th of November 2017 at IK4-AZTERLAN technology center in Durango. It was a Networking with the LIFE ECO-SANDFILL project. More than 50 people attended the day (most of the attendees were from foundry sector or a related sector).
- Presentation of the project at the Ceramica Innova event, held on 6th, 7th and 8th of February 2018, which was celebrated together with CEVISAMA 2018 fair. About 20 people belonging to approximately 10 ceramic companies and related sectors attended the event.

www.foundrytile.eu

Next consortium meeting:

- CTM's facilities, Manresa.
- July 2018.



Project cofinanced by the LIFE program of the European Union

