

New material for urban paving made from 100% waste products

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The manufacture of ceramic tiles in the EU generates around 3 million tones of waste each year. LIFECERAM is a European-funded project led by the Institute of Ceramic Technology (ITC-UJI) that addresses this issue.

Right on schedule, LIFECERAM has achieved its goal of zero <u>waste</u> in the manufacture of <u>ceramic</u> paving through the design of a sustainable manufacturing process whereby elements of the final paving product incorporate the waste generated in other parts of the process. This <u>new product</u> is designed for use in urban paving.

Led by the Instituto de Tecnología Cerámica of the Universitat Jaime I of Castellón (UJI), the consortium also includes the Spanish Association of Ceramic Tile and Paving Manufacturers (ASCER) and three Spanish ceramics companies: KEROS Cerámica, S.L., VERNÍS, S.A. and CHUMILLAS-TARONGI, S.L.

Co-funded under LIFE+, the European Union's only financial instrument dedicated to the promotion of innovative technologies that support the environment, nature conservation and climate action, these results have been three years in the making.

The new process takes waste from the ceramics manufacture process, such as green and fired scraps, glaze sludge and dust from the kiln filters, and turns them into a 100% recycled urban paving product.



Presented last month at ASCER headquarters, the main conclusions from the project is that sustainable urban paving is indeed possible. Javier García, research leader at the ITC, further explained that, not only is it possible, "the composition of the new material closely matches the relative proportions in which the different ceramic waste products [the aforementioned scraps, sludges and dusts] are generated. Adding that "we have achieved the porosity, mechanical resistance and environmental properties we set out to, and the end product can be processed at existing industrial instalations, meaning no changes to processes or equipment at ceramics plants are necessary."

Provided by Asociacion RUVID

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