

facilitates the recovery of decarbonation fines derived from the purification of brine

CONTEXT

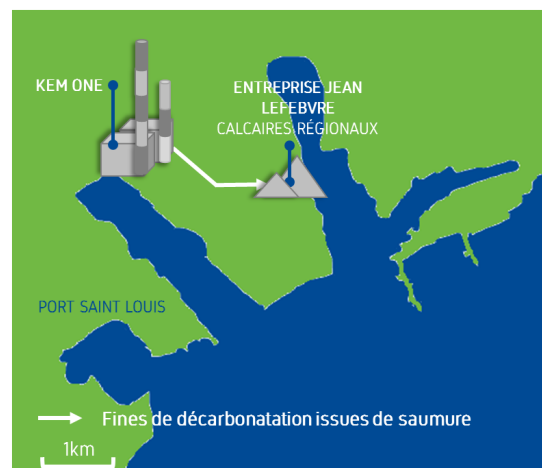
In 2014, as part of its regional approach Granulat+, Jean Lefebvre Méditerranée (EJL) installed a multimodal platform on PIICTO in order to produce high quality secondary raw material from diverse mineral wastes. Operated by Calcaires Régionaux, this platform accommodates, sorts, recycles and values inert and non-inert, non-hazardous construction wastes and industrial by-products. Nearby, Kem One faces storage and transit difficulties to a landfill sites of 7000 tons/y of decarbonation fines, by-produced during the purification of brine.

In 2016, as part of PIICTO's momentum, Jean Lefebvre Méditerranée and Kem One examined the synergy opportunities between the recycling of decarbonation fines and the fabrication of construction alternative materials. The Vabosco project, laureate in 2016 of the region and ADEME's call for projects Filidéchets, aims to experiment the recycling of decarbonation fines into aggregates for road applications. In 2017, mechanical and geotechnical studies were realised by

Eurovia's Technique Direction in laboratory and on diverse test sections. Those studies brought out that the use of decarbonation fine results in the production of

an innovative product whose mechanical properties are favourable to its recovery in sustainable construction and road development. Following the environmental studies by INERIS, the products were authorised for specific utilisations.

The last validation phase was the use of the product in real conditions. It was realised at the beginning of 2019 on a 4 500 m² test area at Calcaires Régionaux's dock at the core of PIICTO. This full-scale test confirmed the studies and validated the use of this new product.



Nicolas Faisse, Calcaires régionaux



« The needs of granulates in France are 400 million of tons per year (6 tons per inhabitant). The share of recycled materials in France has made limited progress since the beginning of the 2000s to achieve 7% in 2018. However, this share exceeds 17% of all the sites of Granulat+ in the region. To go beyond that, the articulation between the Granulat+ and Circular Economy approach as the one developed by PIICTO represents an interesting lever to enhance the recovery of local industrial by-products. Proof of this is, the yard realised on our platform's dock led to the recovery of 4 000 tons/year of Kem One's decarbonation fines. Thus, only with this test yard, 4 000 tons of natural resources were preserved and 26 000 kilometres of the truck were avoided! »

CONTRIBUTION TO CIRCULAR ECONOMY

**INDUSTRIAL ECOLOGY: SUBSTITUTION
SYNERGY / RECOVERY OF MATTER**

EXPECTED RESULTS

**RECOVERY OF A CAPACITY OF 16 000
TONS PER YEAR OF DECARBONATION
FINES FROM KEM ONE FOS AND LAVÉRA
INDUSTRIAL SITES**

**3 TONS OF CO₂ AVOIDED PER YEAR
THANKS TO THE STOP OF THE TRANSIT
TO THE LANDFILL SITE**

PROJECT'S PARTNERS



SUPPORTED BY:



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