



## “DEMONSTRATION OF THE RECOVERY OF CRITICAL METALS SUCH AS INDIUM AND YTTRIUM BY RECYCLING DISCARDED FLAT PANELS”

### SUMMARY

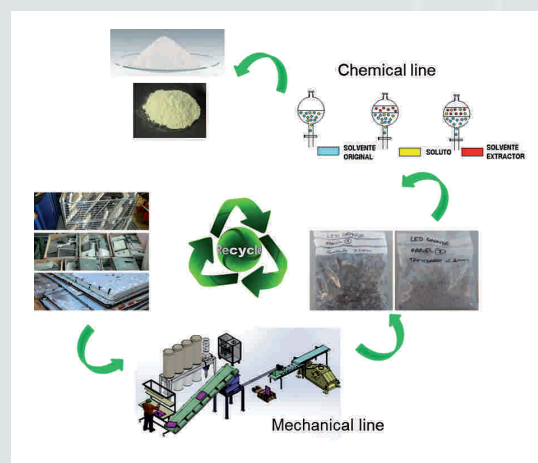
The main objective of LIFE-RECUMETAL project, coordinated by the Lurederra Technology Centre, is the development of a pilot plant to demonstration scale with capacity to process 200 kg of flat panel discarded in order to recover metals of great value such as indium (In) and yttrium (Y), with a purity of 95%, so that its extraction allows reuse in current applications.

The pilot plant will be divided into two lines, the first one will focus on disassembling processes and mechanical processes to separate and recover valuable fractions and, the second one, on chemical processing of certain fractions obtained in the first line for the recovery of yttrium, indium and other valuable contained metals such as silver.

Nowadays, in Europe around 150.000 tons of flat panels are collected every year, from which 120.000 are LCD and 30.000 are plasma. These emerging wastes will presumably be a problem in coming years, when their useful life finish, reason why the management of these wastes represents a great challenge in the recycling industry.

Currently only one third of WEEEs are collected and treated according to European Directives, and specifically recovery and recycling of valuable metals and rare earths represent just a 3%. Nowadays the supply of these materials is mainly controlled by China, which for instance controls

The successful development of the project will very positively contribute on one hand to enhancing the recycling of WEEEs, especially FPDs, and reducing the environmental impact caused by the extraction and processing of these critical metals, and on the other hand to opening a secondary source of raw materials for the EU, reducing its dependency from China.



### PARTNERS

Fundación L´Urederra (Spain) \*  
Ingeniería Navarra Mecánica, S.L. (Spain)  
Fundación Aspace Navarra para el Empleo (Spain)  
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**STARTING DATE:** September 2015

**DURATION:** 42 months

**BUDGET:** 881.520 €



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