



TECNICAS REUNIDAS

## CONSORCIO ESTRATÉGICO NACIONAL DE INVESTIGACIÓN TÉCNICA PARA EL ESTUDIO DE TECNOLOGÍAS DEL V.E.R.D.E

### PROJECT FACT SHEET



CDTI Centro para el Desarrollo Tecnológico Industrial

Open call	CENIT 2009
Funding body	CDTI
Duration	2009-2013
Budget	€34,200,000
Partners	

### PROJECT DESCRIPTION

A research and development of technologies to quickly, economically and reliably integrate electric vehicles into the Spanish market in the future. Going electric is one of the most important courses of action for transport, considering the fact that this sector accounts for / implies one third of the world-wide energy consumption, and more than 90% of its energy needs are met through fossil resources.

### SCOPE OF TR'S WORK

To recycle automotive batteries at the end of their life cycle.

To develop an industrial recovery process for the lithium and valuable metals in batteries, and to a lithium product that complies with the necessary specifications for manufacturing new batteries, consisting of:

- Developing a leaching process for the purpose of obtaining lithium in a solution, in order to subsequently treat it in a precipitation stage to obtain a solid containing all of the elements that interfere in the process, whilst the lithium and copper remain in the liquid phase.
- Carrying out a solvent-based extraction stage in order to recover the copper from the aqueous solution, followed by selective precipitation to obtain lithium phosphate to be used in manufacturing new batteries.