



ABOUT

EcoRecycling is an Italian spin-off company that was created in 2008 by the cooperation of University researchers, La Sapienza University and two SMEs involved in environmental technologies for recycling and treatment of industrial wastes.

The initial aim of this spin-off addressed the technology transfer of a new patent developed to recycle alkaline spent batteries (European patent application EP1684369 A1).

This activity was then extended to the exploitation of other wastes such as spent industrial catalysts, WEEE (Waste Electric and Electronic Equipment) and all typologies of end of life batteries (e.g. Li-ion and Ni-MeH).

EXPERTISE

The main core activity of EcoRecycling is the technology transfer to SME recyclers, through process development and design, construction and start-up of hydrometallurgical multipurpose plants at pilot, semi-industrial, and industrial scale, for the production of metal concentrates from wastes, such as:

- yttrium
- terbium
- gadolinium
- lanthanum from fluorescent powders of lamps
- cobalt from Li-ion accumulators
- zinc and manganese from alkaline batteries
- indium from LCD displays
- copper
- gold and silver from printed circuit boards
- nickel
- vanadium
- molybdenum
- rare earths from spent industrial catalysts

We have a consolidated expertise of technology transfer to SME recyclers (in Italy and in the rest of Europe), testing facilities (two hydrometallurgical mobile plants), many patents protecting the intellectual property of the developed processes and strong experience in research and innovation projects (granted within the EU framework).

FACILITIES & SERVICES

- We offer our know-how in chemical engineering and hydrometallurgical processes (with the support of three Italian universities), for the development of innovative and sustainable processes addressed at waste exploitation and critical raw materials recovery, and for plant design, construction and start-up.
- The following infrastructures are available: one mobile pilot prototype, for hydrometallurgical processes, 20 t/year capacity (leaching reactor 0.4 m³, filtration, precipitation, electro-winning, scrubber for emissions); one mobile semi-industrial scale plant, installed in two containers, for hydrometallurgical processes, 200 t/year capacity (leaching 4 m³, filtration, precipitation, wastewater treatment, scrubber for emissions).
- Our operational premises are located at the industrial site of one of the company's shareholders in central Italy, where an industrial plant for wastewater treatment is operating. This allows to perform pilot scale tests with no problem related to wastewater discharge.



MORE INFORMATION

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