

# Resilient enhancement for the Silicon industry Leveraging the European Matrix

## Launch of the RESiLEX project

Nowadays, the EU is highly dependent on imported critical raw materials – especially in strategic sectors, such as renewable energy: there is an urgent need to create sustainable and resilient value chains in the EU.

June 2022 marked the beginning of the **RESiLEX project**, an Innovation Action funded by Horizon Europe programme, which focuses on reducing EU dependence on critical raw materials for solar panel production.

The main critical raw material used within this field is Silicon: only 32% of the Silicon used is sourced within Europe. Moreover, this material is not easily replacable without serious loss of end performance, and its production is very emissive as it's mainly based on the carbothermic reduction process.

For these reasons, it is essential to secure the supply and reduce the environmental footprint of the entire value chain. The core activity of RESiLEX is to strengthen each part of this chain, through technological improvement and materials recycling.

The project will demonstrate 8 industry-driven innovative solutions, ranging from a carbon-free process for producing Silicon to reusing Silicon from end-of-life panels for the production of Lion Batteries.

The RESiLEX project is coordinated by the Iberian Sustainable Mining Cluster (ISMC). Other partners are: Fundacion Icamcyl, Cetaqua, Tharsis, Norges Teknisk-Naturvitenskapelige Universitet Ntnu, Nanopow AS, CNRS, Institut Polytechnique de Grenoble, Commissariat à l'énergie atomique et aux énergies alternatives, COMET Traitements, RECMA, Envie 2 E Occitanie, Cleancarb Sarl, Universite de Liege, Universiteit Gent, ETA Florence Renewable Energies, Epia

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