



## Data and decentralised AI for a competitive and **GREEN** European Metallurgy Industry

### About ALCHIMIA

Alchimia Project is specialized in the digitalization of EU metallurgy industries to unlock the full potential of artificial intelligence and support the green transition.

### Mission

Alchimia project is to provide the comprehensive and effective metalworking industries in the EU with a platform to support the transition to high-quality, competitive, efficient, and green production processes with the guarantee of high-quality products in the steelmaking industry.

### ALCHIMIA aims to

- Implement a decentralized AI and data solution to support the strategy towards the green transition of European big metallurgy industries;
- Demonstrate the potential of ALCHIMIA solution automatically to dynamically find the optimal mix needed in steel-making processes based on recycled scrap metal, which will be successfully replicated in automotive parts production;
- Assess the environmental impact of ALCHIMIA solution;
- Guarantee the highest levels of trust, safety and seamless collaboration between workers and AI-powered industrial solutions;
- Establish synergies with Artificial intelligence for EU Artificial intelligence on-demand-platform, GAIA-X, European Common Data Spaces and relevant standards;
- Communication and exploitation strategy for the adoption of ALCHIMIA results in several sectors.

## GOALS



**Green Transition in EU Metallurgy Industries**



**Reduce Energy Consumption in steel sector**



**Waste management in steel making process**



**Green Production process in EU steel sector**



**Emission management in EU Steel sector**



**Enabling AI applications in an energy and resource intensive industry context**



**Advancing on the EU and AI strategy**

## Who are we?

ALCHIMIA is a 3 year project funded by the European Union's Horizon 2020 research and innovation programme under grant agreement No. 101070046. The consortium consists of 8 from the industrial, academic and research sector from Spain, Italy, Germany, France, Switzerland, Poland, Greece and the United Kingdom. European partners exhibiting a diverse set of skills and expertise, ranging from CELSA Group and environmental monitoring to research institutes and end users for validating the ALCHIMIA solution. The project partners include: ATOS IT, Cardiff University, BFI, EXUS Software, Fonderie di Torbole, Mandat International, CELSA trio group (CELSA France, CELSA Spain, CELSA Poland), and Scuola Superiore Sant'Anna.

[www.alchimia-project.eu](http://www.alchimia-project.eu)



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