





# **BIObased REsidues Conversion to Advanced** fuels for sustainable **STeel production**













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## What is BioRECAST?

Research Fund for Coal and Steel co-funded BioRECAST proposes a "New and improved steelmaking technique", reusing EAF waste-heat for the on-site conversion of residual biomass into biocoal and sustainable bioenergy, to be used as alternative sustainable fuels for steelmaking process, increasing the sustainability of EAF process.

## **BioRECAST Objective**

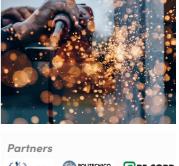
One of the main factors influencing the sustainability of the steel making processes is the intensive use of fossil coal as an energy and carbon source. The innovative BioRECAST project aims to assess and validate the application of residual organic waste as alternative sources to produce biocoal and coal gases for steel making processes, fostering the whole sector decarbonization.

## **BioRECAST Innovation**

The project pathway towards the achievement of this goal is based on two innovative solutions:

- The production of biocoal from residual biomass streams of suitable quality to be used as coal substitute in EAF steelmaking processes;
- The valorisation of EAF hot flue gases to supply the thermal energy required for the pyrolysis process, enabling the use of the pyrolysis gases (Pyrogases) as renewable energy source in the steel sector.
- Assessment of best available solution for pyrogas valorization in the steel making company.







#### **Project Dissemination & Communication**

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