PROSYNTEG

Production of hot hydrogen-rich syngas in integrated plants for efficient injection in the blast furnace and CO2 mitigation

European Commission

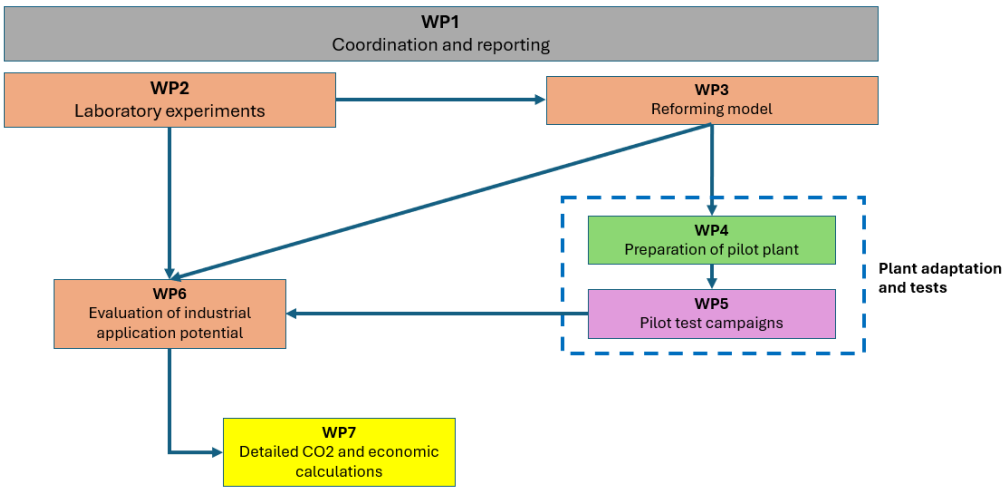
LOW-CARBON STEELMAKING

Transforming industrial residue into power: cleaner steel, greener future.

Developing flexible dry-reforming technologies to produce hydrogen-rich syngas, reducing coke consumption and enabling its direct injection into the blast furnace.

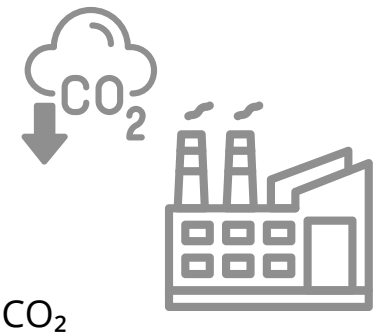
WHAT IS PROSYNTEG?

ProSynteg addresses the urgent need for decarbonizing steel production through Process Integration - an EU-recognized pathway that enables existing BF/BOF plants to reduce emissions.



EXPECTED IMPACT

- Up to 20% CO_2 reduction at BF level
- Supports EU's Green Deal & Clean Steel objectives
- Close-to-market technology for industrial deployment

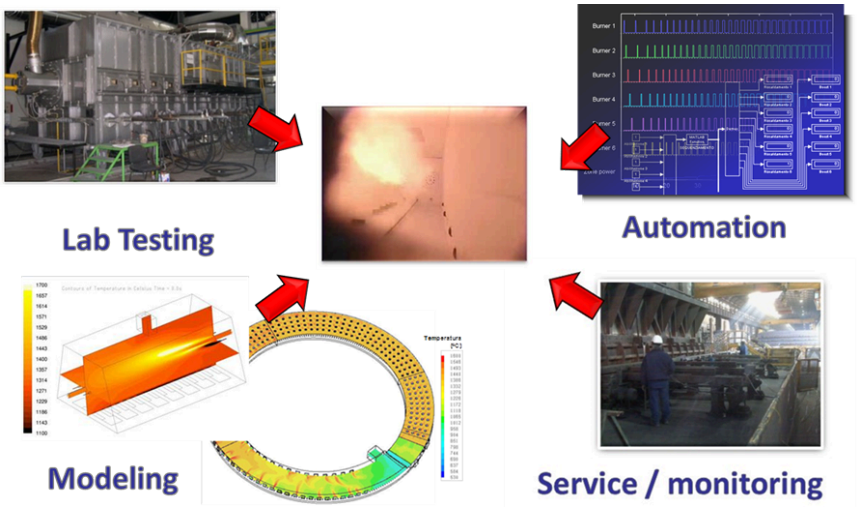


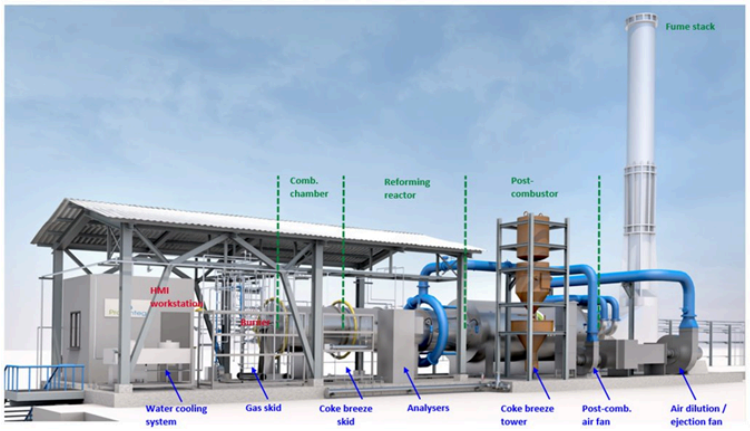
OBJECTIVES

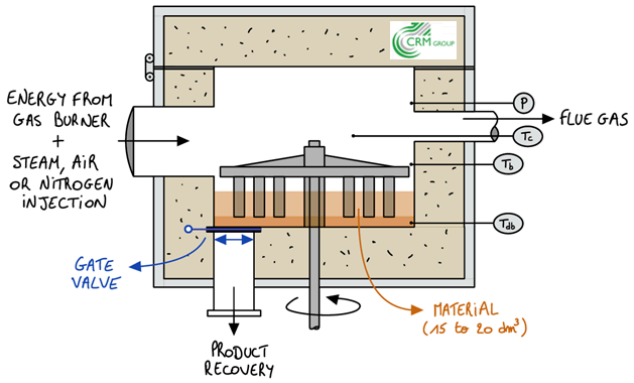
- ✅ **Reduce CO_2 emissions** and **coke consumption**
- ✅ Produce H_2-rich syngas via **dry reforming of COG** with hot CO_2
- ✅ Assess **syngas injection** feasibility **into the BF**

WHAT WE'RE DOING

- **RINA-CSM**: Oxy-combustion tests using coke breeze
- **AMIII**: Bench-scale reformer design & testing
- **PW**: Pilot plant trials with COG & coke breeze
- **CRM**: Alternative carbon source validation
- **ADI**: Feasibility study of BF syngas injection at Taranto site







OUR TEAM

MORE INFO

To learn more about the ProSynteg project and its innovative approach to low-carbon steelmaking, please visit **www.prosynteg.eu** or follow us at our **LinkedIn page**.

The project has received funding from the European Union's Research Fund and Coal and Steel under grant agreement N. 101057965

Funded by the European Union