

TENEMOS
MUCHO
QUE HACER
JUNTOS

**STEELSLAG-CC: PRODUCTION OF STEAM FROM SLAG
AND RADIANT HEAT OF CONTINUOUS CASTING.**

**SPIRE BROKERAGE EVENT,
BRUSSELS,
September 21st, 2017**

OBJECTIVE OF THE PROPOSAL:

- **VALORISATION OF WASTE HEAT FROM SECONDARY STEEL PROCESS**
- **PARTIAL OBJECTIVES**
 - Produce steam by using waste heat from steel slag.
 - Produce steam from the waste heat released by the slabs after the continuous casting step (before the cutting step).
 - Another point for obtaining steam is from EAF fumes. This step has been developed in a current European Project, Pitagoras leaded by Tecnalia, which finishes next month.
 - This way steam would be the termal fluid to capture residual heat from different points of the steel production process.
- **USE OF PRODUCED STEAM :**
 - Steel degasyfing by means of a Venturi system or similar
 - Feed an ORC system to produce electricity (as in Pitagoras Project)
 - Supply heat to a local district heating (if any, as in Pitagoras project)

Confidential document. This document belongs to Tecnalia R&D.



CONSORTIUM:

- **TECNALIA**, leader of the consortium, develop steam production prototype from slag and radiant heat from the CC step,
 - **Steel producer(s)** for testing both prototypes (identified, TBC)
 - **Steel equipment supplier**
 - **ESCo** for financing equipment and dealing with the business (electricity and heat selling).
 - **Steel association** for disseminating the development (identified, TBC)
 - **Partner skilled in Steel slag re-use** (identified, TBC)
 - **Other possible roles to be covered.**
-
- **RELATED CALLS:**
 - **SPIRE3-2018: Energy and Resource Efficiency in highly Energy Intensive Industries (IA)**
 - **SPIRE 7-2020: Recovery of industrial water, thermal energy and substances contained therein (IA)**
-
- **MAIN KEY ACTIONS COVERED:**
 - **KA 2.2 Energy harvesting, storage and reuse**
 - **KA 2.5 New Energy and resource management concepts (including industrial symbiosis).**



- **CONTACT DETAILS:**

- **Patricio Aguirre,**
- **+34 667 116 1193**
- **patricio.aguirre@tecnalia.com**

Confidential