



**5th SPIRE
Brokerage event**

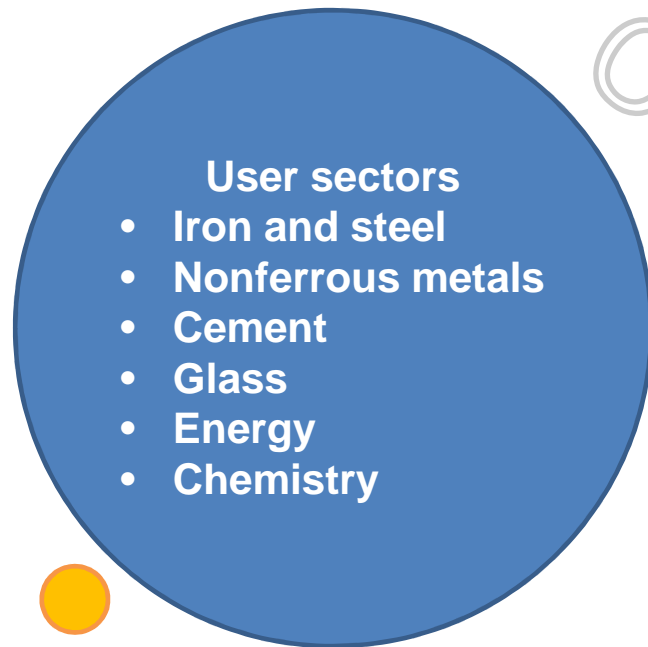
21 September 2017

***CROSS-SECTORIAL R&I WITH
THE REFRACTORIES INDUSTRY***

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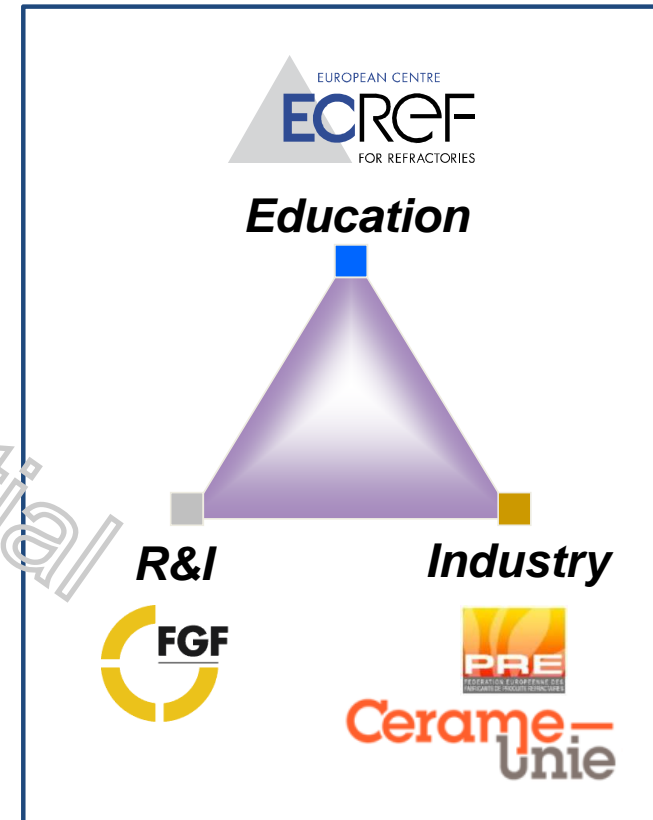
THE EUROPEAN CENTRE FOR REFRACTORIES

Refractory sector –
Annual turnover



**Refractory
sector**

Confidential

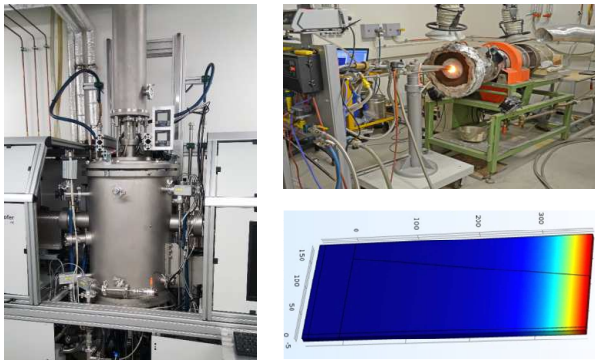


THE EUROPEAN CENTRE FOR REFRACTORIES

Refractory materials R&D

Materials properties at
high temperature

Simulation and design



Industrial processes R&D

Recycling/Reuse

Process design

Energy and environmental
consultancy



Dissemination and education

Training

Network with
universities


Network with
industry

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PROJECT IDEAS

Call	Contributions	Expected impact
<p>CE-SPIRE-03-2018</p> <p>Energy and resource flexibility in highly energy intensive industries</p>	<p>Effects of introducing secondary raw materials</p> <p>Quality of main products</p> <p>Design of production processes to include reuse and recycling</p> <p>Production with fluctuating energy supply</p>	<p>Secondary raw materials from other sectors</p> <p>Usage in SPIRE sectors</p> <p>Reuse and recycling across SPIRE sectors (materials, processes)</p> <p>Cross-sectorial methods to cope with fluctuation</p>

PROJECT IDEAS

Call	Contributions	Expected impact
<p>LC-SC3-EE-6-2018</p> <p>Business case for industrial waste heat/cold recovery</p> <p>2018: Cost-benefit models for industrial waste heat/cold recovery</p>	<p>Characterisation of processes in the refractories industry</p> <p>Utilisation of waste heat</p> <p>Flexible production processes</p> <p>Access to industry</p>	<p>Energy sources for the production of refractories</p>  <p>■ Gas 82,5 % ■ Oil 1,9 % ■ Electricity 15,6 %</p> <p>SPIRE-wide activity covering ALL sectors</p>

PROJECT IDEAS

Call	Contributions	Expected impact
<p>CE-SC5-01-2018</p> <p>Methods to remove hazardous substances and contaminants from secondary raw materials</p>	<p>Reuse/Remanufacturing/ Recycling in the refractories industry and its user sectors</p> <p>Quantity of contaminants /quality of main products</p> <p>Design of production processes</p>	<p>Cross-sectorial effort to increase the use of secondary raw materials</p> <p>How much contamination is still OK for the refractory products to perform?</p>

CONTACT DETAILS

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