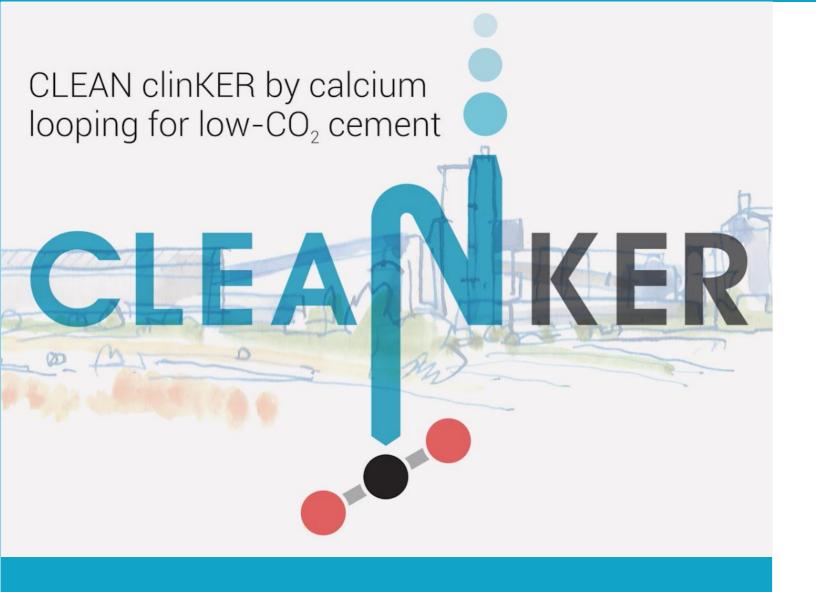
# **CLEANKER Overview**

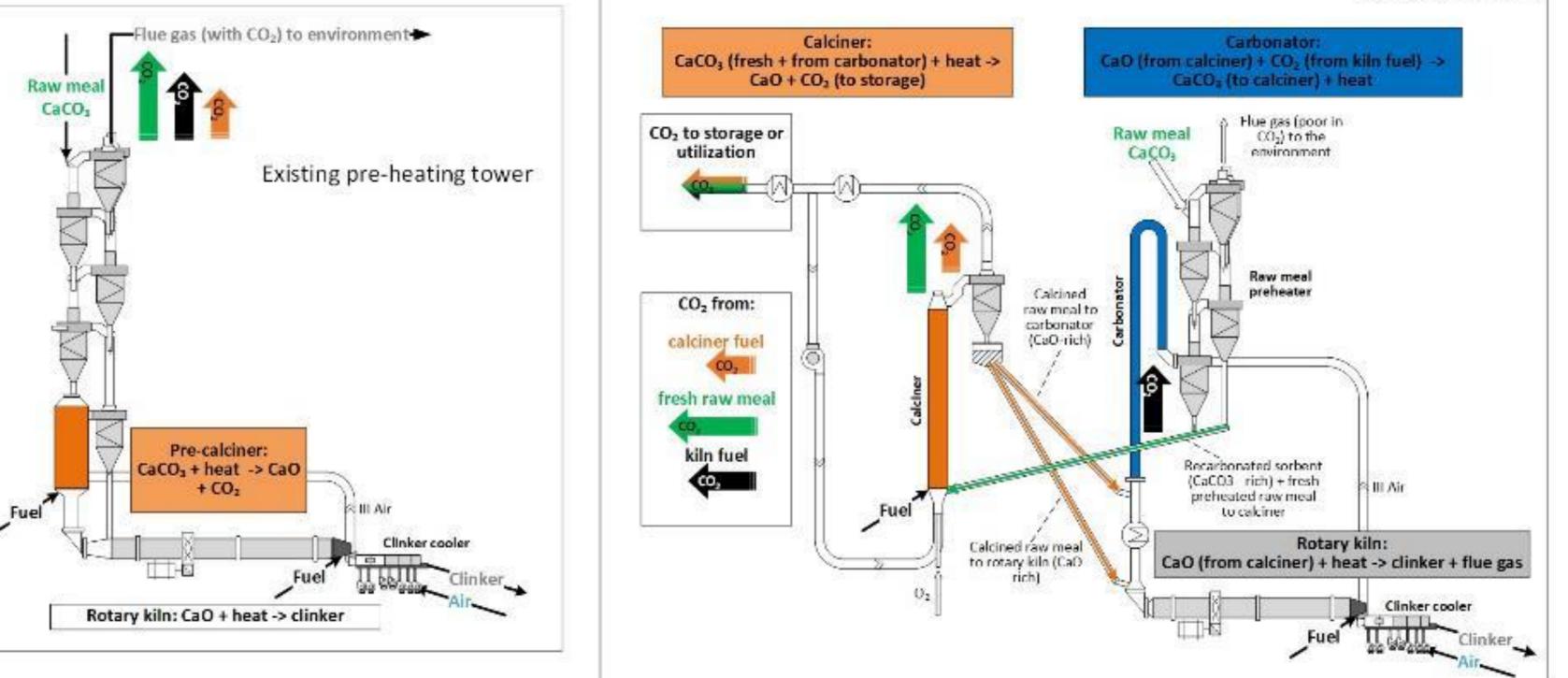


CLEANKER is a Horizon 2020 project with the ultimate objective of demonstrating the applicability of the calcium looping (CaL) process to the cement production.

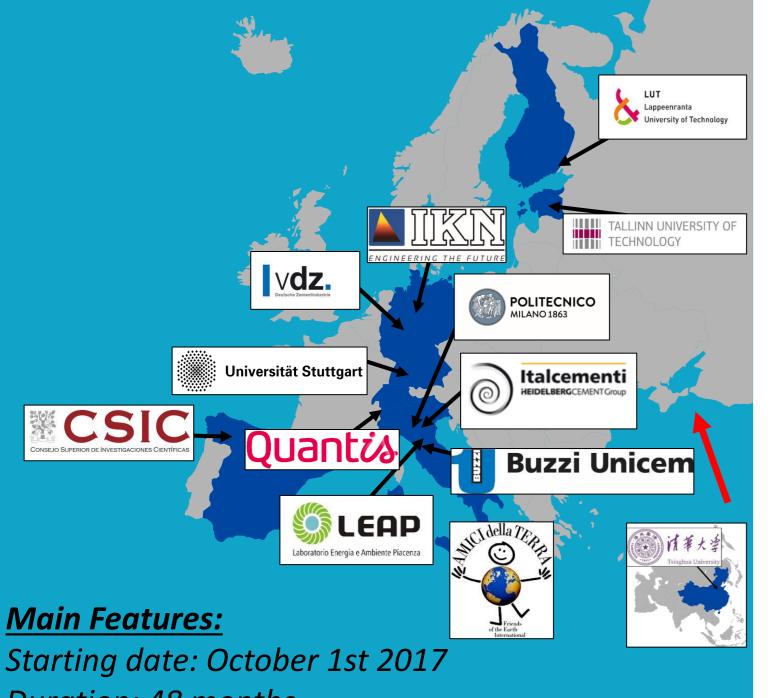
## Objectives

CLEANKER is a Horizon 2020 project that will demonstrate the integrated calcium looping process at TRL 7, in a new demo system connected to the 1300 kton/year cement plant, operated by Buzzi Unicem, in Vernasca (Piacenza, Italy).

### Concept



	CaL cement pla
Calciner: resh + from carbonator) + heat -> CaO + CO <sub>2</sub> (to storage)	Carbonator: CaO (from calciner) + CO <sub>2</sub> (from kiln fuel) -> CaCO <sub>2</sub> (to calciner) + heat
	<ul> <li>Hue gas (poor in.</li> </ul>

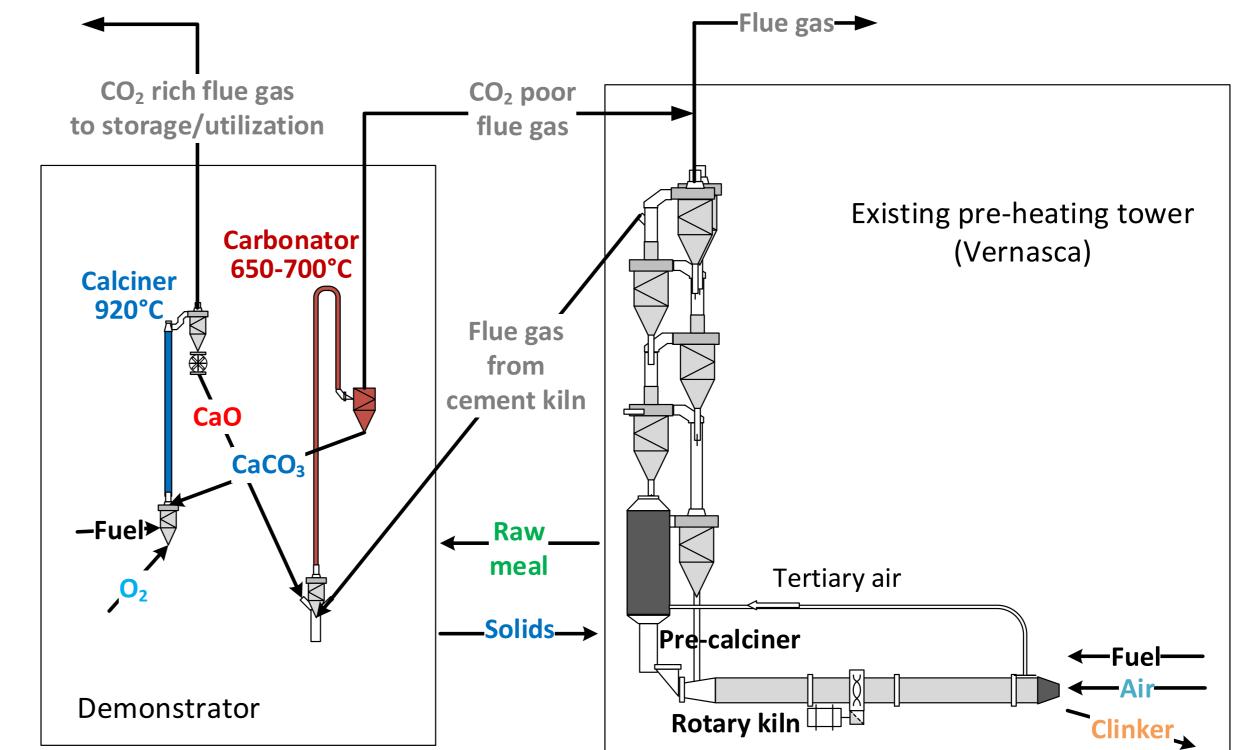




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Number of partners: 13 from five EU member states
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Integrated configuration (to be tested in Vernasca cement plant)

- CO2 from kiln flue gases captured in the carbonator;
- The calciner of the CaL process is oxy-fired (in the full-scale plant the oxy-fired CaL calciner will act also as pre-calciner).



plus Switzerland and China Budget: 9.237.851 € *EC contribution*: *8.972.201* € *Chinese government funding: 265.650 €* Coordinator: LEAP scarl

M. Fantini, M. Spinelli LEAP

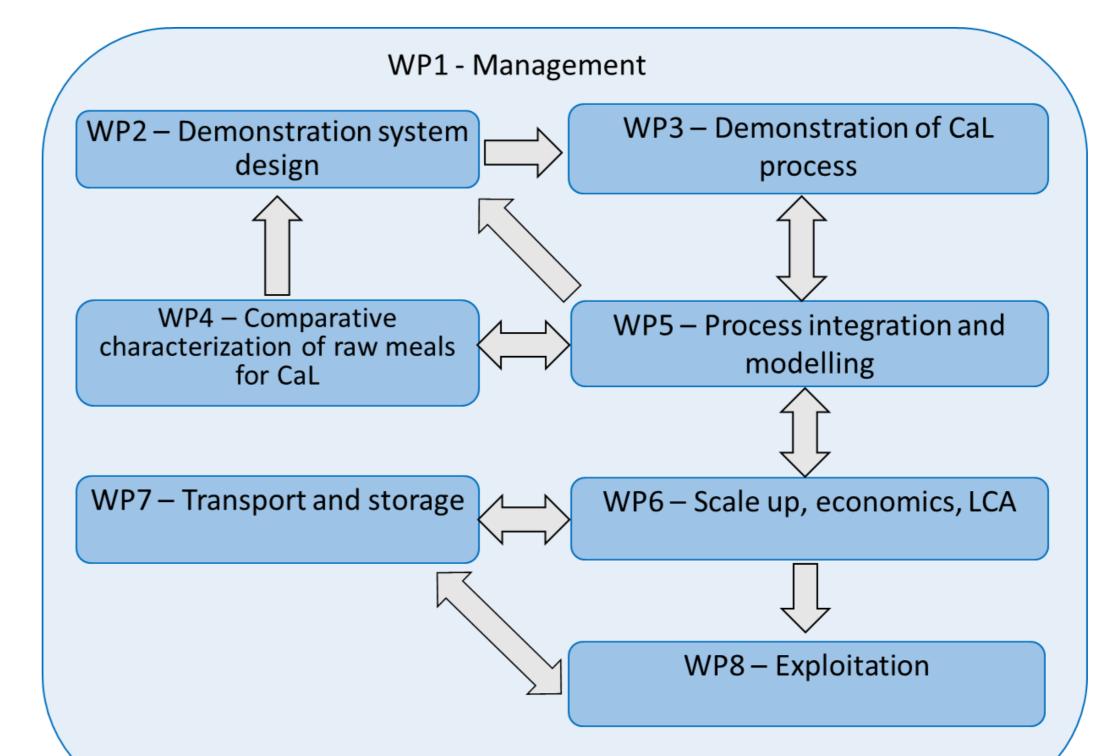
**Contact:** Martina.Fantini@polimi.it

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# Methodology





#### Programme for research and innovation

### under Grant Agreement n<sup>o</sup> 764816

