

## PROJECT OBJECTIVES

The RAPID DRY project aims to **optimise** the **DRYING PROCESS OF CERAMIC CAST PIECES** thanks to a

REDUCTION OF ENERGY  
CONSUMPTION AND CO<sub>2</sub>  
EMISSIONS



MITIGATING  
CLIMATE CHANGE



REDUCTION OF PRIMARY RAW  
MATERIALS CONSUMPTION



RECYCLING CERAMIC WASTE  
AND  
DECREASING  
MINERAL MINING



The project will also reduce **PRODUCTION COSTS**

- **INCREASING THE COMPETITIVENESS** of the European ceramic industry on international markets
- **INCREASING THE EU CERAMIC INDUSTRY MARKET SHARE** in the high-end segment, avoiding carbon leakage

## LIFE RAPID DRY project



**28 MONTHS**  
DURATION



**2020/06/01**  
START



**2022/09/30**  
END

**LIFE19 CCM/IT/001243**  
LIFE PROJECT

## PARTNERS



[www.setecsrl.it](http://www.setecsrl.it)



[www.lceengineering.eu](http://www.lceengineering.eu)

# RAPID DRY



WITH THE CONTRIBUTION OF THE LIFE  
PROGRAMME OF THE EUROPEAN UNION  
LIFE19 CCM/IT/001243

## RAPID DRYING OF CERAMICS

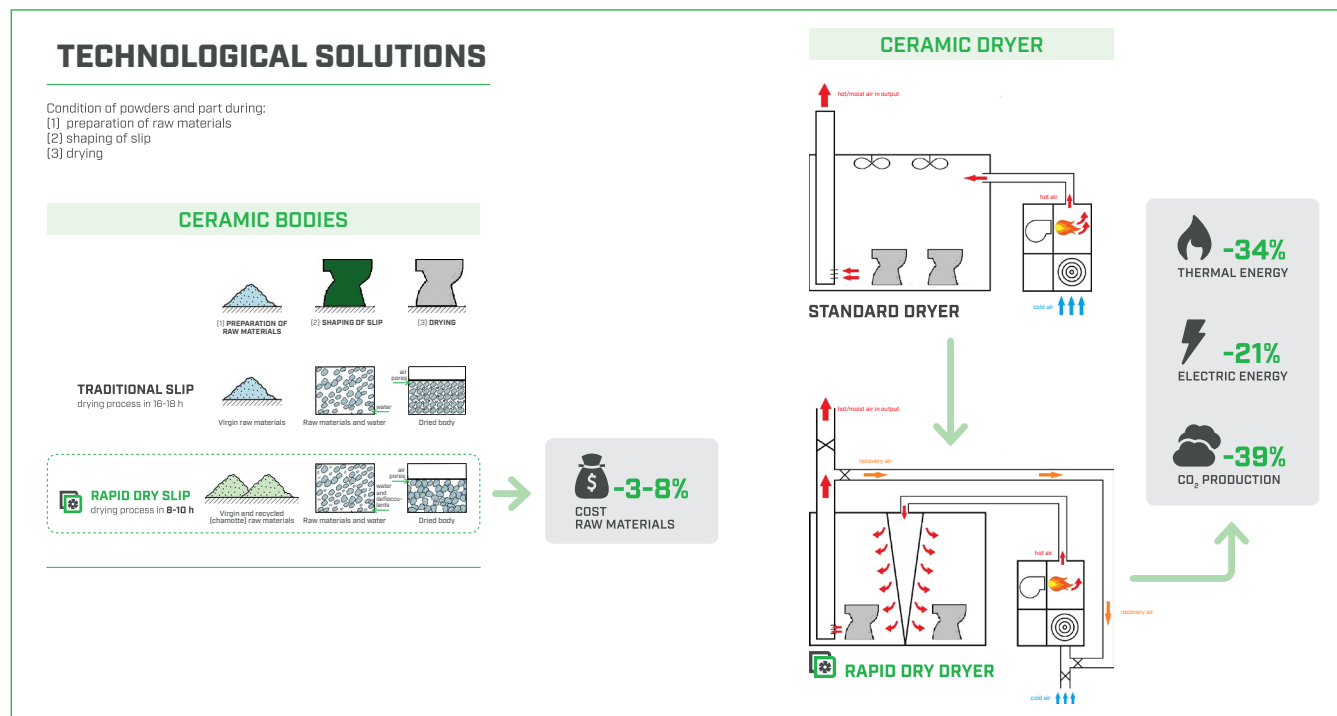
## REDUCING ENERGY CONSUMPTION AND CO<sub>2</sub> EMISSIONS WHILE PRESERVING PRODUCT QUALITY

[www.rapid-dry.eu](http://www.rapid-dry.eu)

The **RAPID DRY** project objectives will be achieved by means of

- **A CHAMBER DRYER** that optimises currently available techniques in a very cost effective way as to be **easily accessible** for the ceramic industry, and leading to **higher energy saving** then currently achievable.
- **MODIFIED CERAMIC BODIES** (fire clay and vitreous china) to optimise the drying curve while preserving excellent performance in quality and resistance.

This will be obtained thanks to a **new slip formulation**, where also **recycled raw materials** are used, allowing resources saving.



## EXPECTED RESULTS



### PROTOTYPE DRYER

- **34%** reduction of THERMAL ENERGY consumption
- **21%** reduction of ELECTRIC ENERGY consumption
- **39%** total reduction of CO<sub>2</sub> EMISSIONS

DRYING CYCLE  
reduced to  
**8 - 10 hours**

PRODUCT  
QUALITY  
preserved



### NEW FORMULATIONS OF SLIPS

- VIRGIN raw materials saved by **5 - 15%**
- COST reduction of **3 - 8%**



### TECHNOLOGY FULLY VALIDATED

- Trials and demonstrations in operational environment
- Full life cycle assessment and life cycle costing performed
- About **5400** sanitaryware and **1200** tableware pieces successfully dried