



Innovative High-Temperature Thermal Storage for Industrial Applications

KEY FACTS



11 Partners



3 years and 6 month Duration



4 European Countries (French, Spain, Belgium and Portugal)



+3 Million Euros



4 Energy-intensive European industries from aluminum, ceramics, and steel, an engineering/ thermal-equipment manufacturer, and leading research teams in energy storage, materials, modeling, system design, prototyping, LCA, techno-economic assessment, and technology transfer to industry.

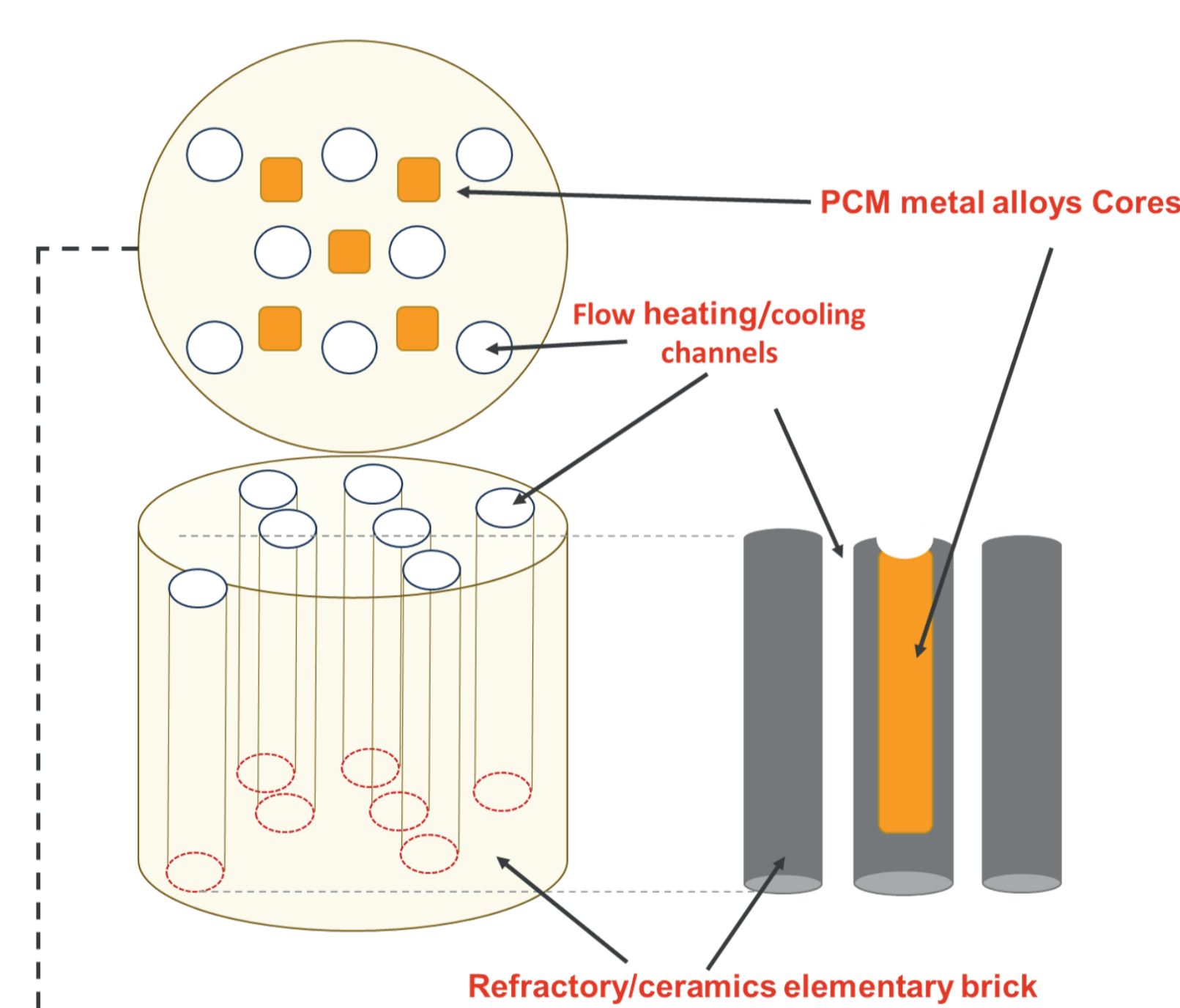
APPROACH

The HEATERNAL concept will ensure 48-hours heat storage capacity at an industrial scale through modeling and simulation approaches. It will be optimized through a hybrid storage unit of a refractory brick containing a Phase Change Material (PCM). The PCM composition will be adjusted to comply with multiple industrial applications.

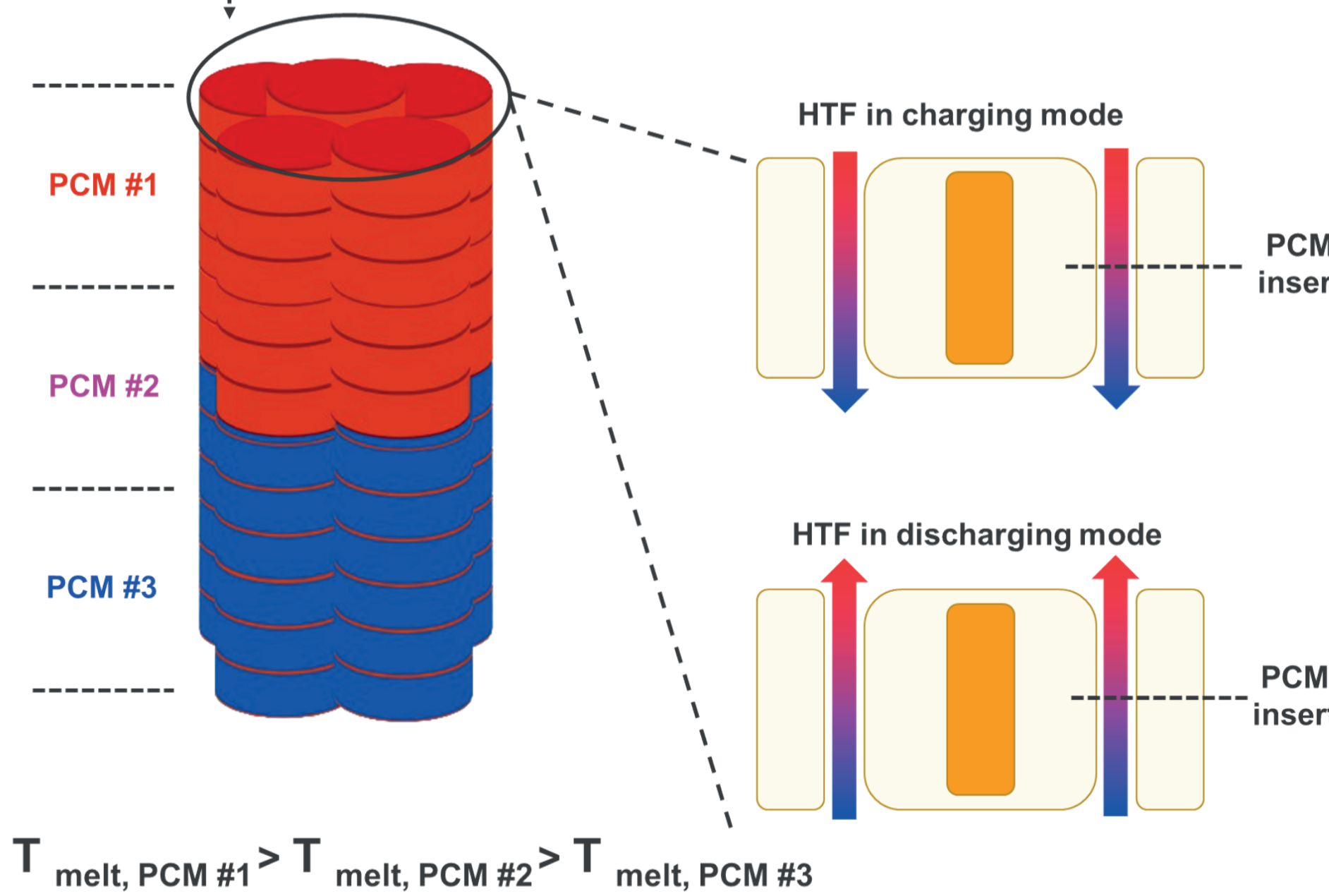


Heaternal Concept

HEATERNAL Heat Storage Unit



HEATERNAL TES System



The TES Unit contains phase-change materials (PCMs) that store more heat during phase transition, increasing energy density without raising the temperature. HEATERNAL's PCMs will reduce costs and footprint, satisfying thermal energy needs for the aluminium, ceramic pigment, and steel industries.

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Launched in May 2023, HEATERNAL has received funding from the European Union's Horizon research and innovation program under Grant Agreement n° 101103921 for 3 years and 6 months. However, views and opinions expressed are solely those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.