

# Compact REtrofit Advanced Thermal Energy storage

An economically affordable, compact and loss-free heat battery for existing buildings.

The **CREATE** system is an advanced thermal storage system based on **Thermo-Chemical Materials** (TCMs), that enables economically affordable, compact and loss-free storage of heat in existing buildings. The system consists of several storage modules containing salt, which is hydrated (charged) in summer and dehydrated (discharged) in winter.



Schematic of the CREATE concept





The intermediate form of the composite salt

The final shape used in the 1 kg reactor which will be used in the CREATE system

## **CREATE is focusing the following** sub-objectives:



Stable & compact materials



Long lifetime



Affordable technology





Efficient and high power energy discharge

#### Safe and reliable operation

**Future value** chain

### DEMONSTRATION

MOSTOSTAL will install a full scale solar TCS system delivered by the CREATE project in Warsaw, Poland. The system will be installed into  $\mathbf{O}$ orphanage where a land climate delivers winters cold and warm summers.

### PARTNERS



RINA. Excellence Behind Excellence.



HORIZON 2020 RESEARCH PROJECT This project is supported by the European Commission under the Energy Theme of the Horizon 2020 for research and Technological development.

H2020-EeB-2014-2015/H2020-EeB-2015 Grant Agreement number: 680450

This dissemination material reflects only the author's view and the European Commission is not responsible for any use that may be made of the information it contains.



WWW.CREATEPROJECT.EU