

NEW STORAGE LATENT AND SENSIBLE CONCEPT FOR HIGH EFFICIENT CSP PLANTS



H2020 Grant Agreement N°: 720985

H2020 Grant Agreement No.: 720985

Project acronym: NEWSOL

Project full title: NEW StOrage Latent and sensible concept for high

efficient CSP plants

Deliverable D3.2 - Material Development Progress Report

ABSTRACT

This deliverable describes relevant results from WP3 Advanced functional material development & thermal performance. This WP3 addresses the development the materials implied in the prototypes to be built in NewSol, namely the thermocline concrete tank and the concrete module, and this deliverable points out which material options seem to correspond better to the requirements defined in WP2.

The material advances during the 12 first months of the Project are organized in five groups of work:

- 1. High Thermal Performance Concrete for module and concrete tank. Partners involved: CSIC, SECIL, UEvora.
- 2. Molten salts as heat transfer fluid and sensible heat storage (see also D3.1). Partners involved: DLR, LNEG, YARA, UEvora.
- 3. Slag material for sensible heat storage. Partners involved: UEvora, SECIL, CSIC.
- 4. PCM selection and encapsulation for latent heat storage. Partners involved: UEvora, ETH.
- 5. High thermal insulating storage material. Partners involved: ACCcons