



## **SOLPART**

### **High Temperature Solar-Heated Reactors for Industrial Production of Reactive Particulates**

**European funded project - Grant Agreement number 654663**

#### **Deliverable 7.3**

**WP7 – Plant integration, scaling up, economic and risk assessment of the solar process**

**Deliverable Title: Report on potential for scale-up and on safety issues**

**Date of Delivery: 7 January 2020**

**Deliverable Author(s): Cristina Prieto, Antón López Román**



## **1 Introduction**

Deliverable 7.3, builds upon the previous Deliverable 7.1 aims to do a study for the scale-up risk of the solar reactor, thermal storage and particle transport processes for a 3,500 tons/day plant. The aim of this deliverable is Report is to summarize the potential risk for scale-up and on safety issues.

## **2 Conclusions**

In this chapter it is presented a summary of the main risks of the SOLPART technology thinking about the scalability required to take it to TRL9. Additionally, the aspects associated with the safety of the process to guarantee the technical viability of the commercial operation have been analysed. All the aspects analysed and the mitigation measures identified invite us to be optimistic in the scalability of the technology

## **3 References**

- [1] REN21, «Renewables 2017: global status report.» p. vol. 72. 2017. doi:10.1016/j.rser.2016.09.082..
- [2] I. E. Agency, «Technology Roadmap. Concentrating Solar Power,» 2010.
- [3] Website, «<https://www.statista.com/statistics/936095/global-cement-demand-by-country/>,» 12 2019.

For more information, please contact SOLPART Coordinator (CNRS-PROMES):  
Gilles.Flamant@promes.cnrs.fr