



Project No: **764697**

Project acronym:

CHEERS

Project full title: Chinese-European Emission-Reducing Solutions

Type of Action: **RIA**

Call/Topic: European Horizon 2020 Work Programme 2016 – 2017, 10. 'Secure, Clean and Efficient Energy', under the low-carbon energy initiative LCE-29-2017: CCS in Industry, including BioCCS

> Start-up: 2017-10-01 Duration: 60 months

Deliverable D1.1: Launch event

Due submission date: 2017-10-30 Actual delivery date: 2017-12-07

Organisation name of lead beneficiary for this deliverable: SINTEF Energi AS

| Project funded by the European Union's Horizon 2020 research and innovation programme under grant agreement No 764697, and co-funded by the Chinese Ministry of Science and Technology (MOST) | | |
|---|---|---|
| Dissemination Level | | |
| PU | Public | |
| CO | Confidential, only for members of the consortium (including the Commission Services and MOST) | Х |



Abstract for publication on the website of CHEERS

CHEERS conforms to the European Horizon 2020 Work Programme 2016 – 2017, 10. 'Secure, Clean and Efficient Energy', under the low-carbon energy initiative (LCE-29-2017: CCS in Industry, including BioCCS). The ambition is to improve the efficacy of CO2 capture in industry, and help ensuring sustainable, secure, and affordable energy.

The action involves a 2nd generation chemical-looping technology tested and verified at laboratory scale (150 kWth). Within the framework of CHEERS, the core technology will be developed into a 3 MWth system prototype for demonstration in an operational environment. This constitutes a major step towards large-scale decarbonisation of industry, offering a considerable potential for retrofitting industrial combustion processes.

The system prototype is based on a fundamentally new fuel-conversion process synthesised from prior research and development actions over more than a decade. The system will include heat recovery steam generation with CO_2 separation and purification, and it will comply with industrial standards, specifications and safety regulations. Except for CO_2 compression work, the innovative concept is capable of removing 96% of the CO_2 while eliminating capture losses to almost zero.

The CHEERS project is financed by the European Union's Horizon 2020 research and innovation programme under grant agreement No 764697, and co-funded by the Chinese Ministry of Science and Technology (MOST).

CHEERS started 1 October 2017 and is scheduled to end by September 2022. The estimated budget is 16 mill. EUR.

The launch event for CHEERS was split in two parts: A technical pre-meeting in China 18-20 October including a site visit to the pilot site at Deyang, and a traditional kick-off event in Norway 28-30 November. The event in Trondheim comprised a number of meetings:

- Kick off meeting
- Management Support Team meeting
- General Assembly meeting
- Site visit to CCS laboratory
- Executive Board meeting
- Separate Work Package meetings