Grant agreement no:
608571

Project acronym:
SUCCESS

Project full title:
Industrial steam generation with 100% carbon capture and insignificant efficiency penalty - scale-up of oxygen carrier for chemical-looping combustion using Environmentally sustainable materials

Collaborative project

Theme:
FP7 – ENERGY.2013.5.1.1

Deliverable D9.2

Project information flyer

Due delivery date: 2015-02-28
Actual delivery date: 2015-10-09

Lead beneficiary:
Partner no. 1 - Vienna University of Technology (Vienna)

Dissemination level:
Public (PU)

TECHNISCHE UNIVERSITÄT WIEN Vienna University of Technology	DELIVERABLE 9.2

Project information flyer

SUCCESS - Industrial steam generation with 100% carbon capture and insignificant efficiency penalty - scale-up of oxygen carrier for chemical-looping combustion using Environmentally sustainable materials	**Keywords**: CLC pilot plant, design optimization, dual circulating fluidized bed
Work package: WP9 Dissemination	
Involved partners: Vienna	**Dissemination level**: Public (PU)
Related Task: Task 9.1	

Objective

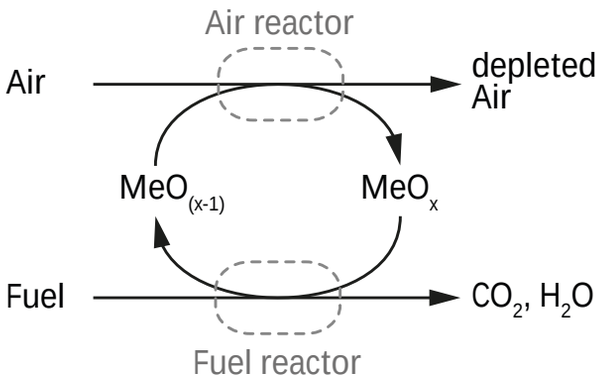
Within the project, two public workshops will be organized. To improve the impact of these workshops a project flyer has been designed. The print run was 1200 pieces. A part of the flyers will be distributed at the public workshop in M26. The rest will be distributed among the partners. These copies will be distributed by the partners at conferences they attend.

Reason for delay and impact on project time schedule

The scheduled delivery date for Deliverable D9.2 was M18 to ensure availability of the project information flyer at the public workshop. Since the workshop is held in M26 the production of the flyer has been postponed too. The flyer is produced and available before the public workshop starts, so no impact on the project time schedule occur.

CHEMICAL LOOPING COMBUSTION

Chemical-looping combustion (CLC) has unique potential for reducing energy and cost penalty for CO_2 capture, as it avoids the costly gas separation of other CO_2 capture technologies. This is achieved by separating the combustion process into two steps, so that air and fuel are never mixed. A metal oxide, the oxygen carrier, transport the oxygen from air to fuel. SUCCESS aim at making the CLC technology ready for demonstration at the next scale (10 MW_{th} fuel power).



PARTNERS

- TU Wien | Vienna, AT
- Chalmers University of Technology | Chalmers, SE
- Agencia Estatal Consejo Superior de Investigaciones Cientificas | CSIC, ES
- IFP Energies nouvelles | IFPEN, FR
- Institut National Polytechnique de Toulouse | INPT-IMFT, FR
- Stiftelsen SINTEF| SINTEF, NO
- SINTEF Energi AS | SINTEF ER, NO
- Darmstadt University of Technology | TUD, DE
- Vlaamse Instelling voor Technologisch Onderzoek | VITO, BE
- Euro Support Advanced Materials | ESAM, NL
- Johnson Matthey | JM, UK
- Bertsch Energy | Bertsch, AT
- Electricite de France | EDF, FR
- Shell Global Solutions | Shell, NL
- Total Raffinage Chimie | TOTAL, FR
- University of natural Resources and Life Sciences Vienna | BOKU, AT

TECHNISCHE UNIVERSITÄT WIEN

SUCCESS

Scale-**U**p of oxygen **C**arrier for **C**hemical-looping combustion using **E**nvironmentally **S**u**S**tainable materials

www.clc-success.eu

SEVENTH FRAMEWORK PROGRAMME

SUCCESS

The main goal of the SUCCESS project is to make the last missing step towards demonstration of the chemical looping technology at the next scale (10 MW_{th} fuel power input). This includes scale-up of several aspects of the technology as well as demonstration at 1 MW_{th} fuel power. This main goal can be divided into three key objectives of the project:

- Scale-up of material production making oxygen carrier materials available at large quantities for the use in demonstration plants.
- Scale-up of CLC system design to 1 MW_{th} fuel power including comprehensive testing campaigns with the new materials in different pilot plants up to 150 kW_{th} fuel power.
- Assessment of the overall potential of the technology based on the figures from results of the project compared to alternative technologies in several aspects (Health & Safety, techno-economic potential)

Imprint:
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Contact: Project coordination: Stefan Penthor, TU Wien, stefan.penthor@tuwien.ac.at

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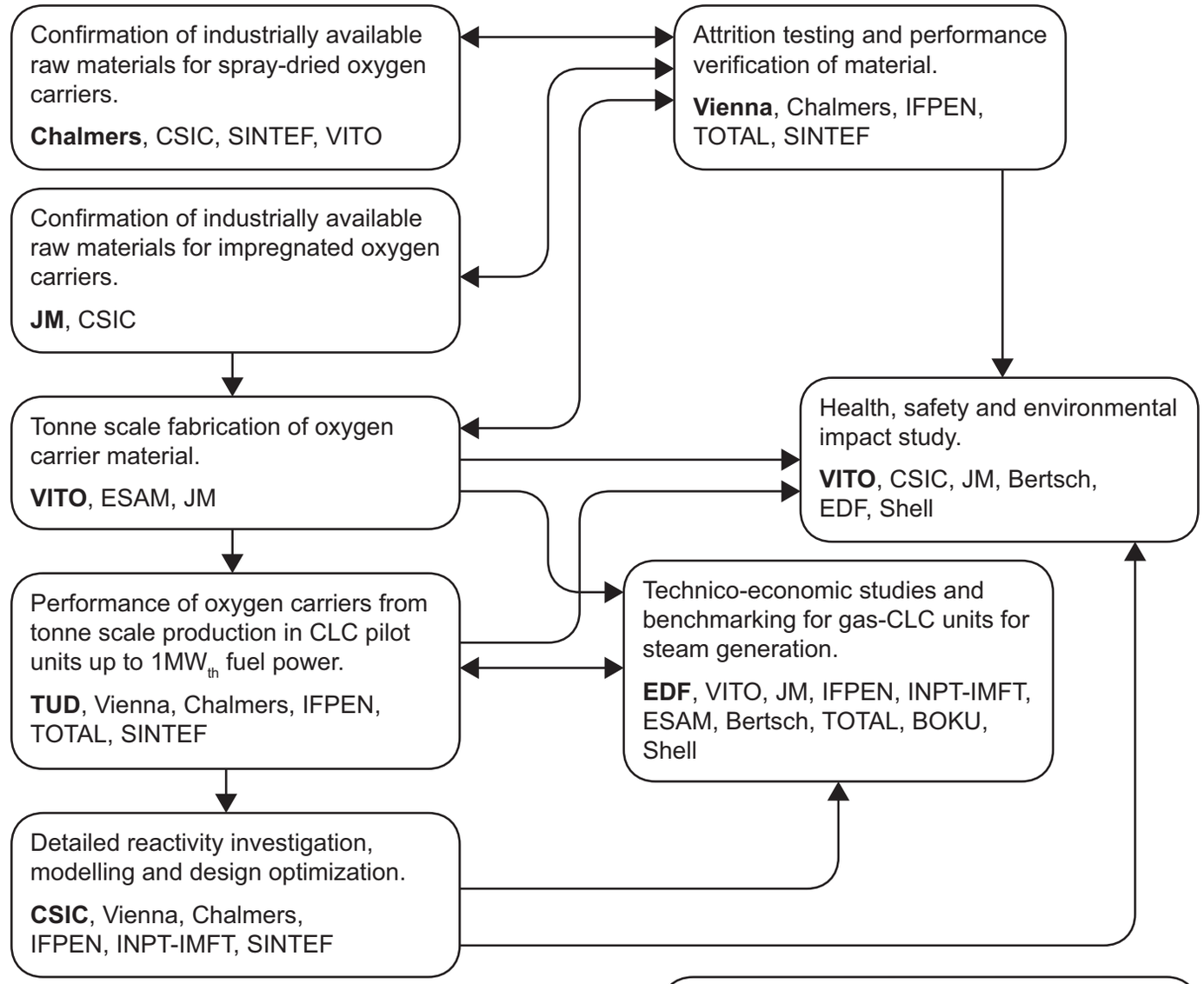
PROJECT ORGANISATION



Management and coordination.

Vienna