TRUST

High resolution monitoring, real time visualization and reliable modeling of highly controlled, intermediate and up-scalable size pilot injection tests of underground storage of CO_2

Contract #309067

Deliverable Number	**D8.3**
Title	**Dissemination and communication plan**
Work-Package	**8**
Lead Participant	**MERI**
Contributors	
Version:	**1**
Revision level:	**01**
Due Date:	**Month 36**
Reviewed by:	
Status:	
Dissemination level	**PU**

Executive summary

TRUST aims at conducting CO_2 injection experiments at scales large enough so that the output can be extrapolated at industrial scales. It relies on four sites: the heavily instrumented sites of Heletz (Israel, main site) and Hontomin (Spain), access Miranga (Brazil) and the emerging site in the Baltic Sea region. The objectives are to: carry out CO_2 injection with different strategies, displaying characteristics representative of the large scale storage and with injection volumes that will produce extrapolable reservoir responses; Develop, use and implement characterization and MMV technologies for maximized safety and minimized risks, including real time visualization of the CO_2 containment and detection of possible failures; Develop optimal injection strategies that maintain realistic figures of injectivity, and capacity while simultaneously optimizing the use of energy; Detect and mitigate CO_2 leakage at an abandoned well; Produce comprehensive datasets for model verification and validation; Improve the predictive capacity and performance of computational models, as well as their capability to handle uncertainty and thermo-hydro-mechanical and chemical phenomena at different scales (at the scale of the experiments) and upscaling (extrapolation to industrial scale) simulations; Address critical non-scientific issues of public acceptance, community participation, communication, dissemination, liabilities and prepare templates for the preparation and application of injection licenses and communication with regulators; Establish on-site facilities for analysis of monitoring and measurement, providing training and capacity building; Address the risk assessment in a meaningful way; Prepare a platform for the exploitation of project findings and for knowledge and information sharing with planned, large scale, CCS projects. Allow open access to sites, and seek cooperation with large scale CO_2 injection projects both at the European and International levels.

Keywords	Large scale CO_2 Injection, Monitoring, Model validation, Injection strategies, risk assessment, communication, extrapolation, real time visualization, open access, capacity building, and training.

Table of Contents

1. Introduction

The present Dissemination and Communication Plan provides TRUST project partners with a strategy and action plan to interact with target groups and among themselves. It presents a systematic series of actions aimed at disseminating the TRUST project activities and results through the use of communication methods and channels, using the available resources within the duration of the project.[1] The purpose of this document is to formalize all communication and dissemination actions planned in the framework of the project.

This plan was prepared by MERI and then discussed with Work Package Leaders, project partners, and finalized after their comments. This document is intended to be a live folder, which will continuously be enriched with the forthcoming project's achievements and contributions from partners.

[1] The title "dissemination strategy" as shown in the Annex I 'Description of Work' has been changed to "communication and communication plan" to go beyond one-way communication. An stakeholder involvement strategy would include the process of engagement and dialogue with different audiences, which extends beyond the scope of the project.

2. Dissemination and communication objectives

The main aim of this report is to plan a proactive stance in raising awareness of the TRUST project and CCS to different audiences. This will be carried out by using different communication channels and materials, but also by face-to-face information, conferences and workshops.

More specifically, the objectives of dissemination and communication in the framework of the TRUST project include:

- To ensure the overall visibility of the project within the scientific community interested in CCS in order to increase their knowledge about the project, as well as to encourage them to make use of the project findings and results in their work;
- To help the project partners fulfil their communication efforts and outputs dissemination;
- To coordinate all levels and types of communication in relation to the project.

The coordinator is responsible for most of the dissemination and communication activities, with the support of WP8 leader (MERI). Nevertheless, all project partners will contribute to the implementation of communication and dissemination actions.

3. Stakeholder groups

TRUST will target internally the partners and externally different stakeholder groups, as described below.

Internal communication - TRUST project partners

Communication at the project level (among project partners) will ensure the quality of information exchange on the implementation progress, barriers, experiences, best practice, management and subject-matter issues, project results and outcomes that will be gained by project partners during preparation and implementation phases. The project partners are as follows:

1. Environmental & Water Resources Engineering Ltd. EWRE Israel
2. Uppsala Universitet UU Sweden
3. Technion – Israel Institute of Technology ITT Israel
4. Georg-August-Universitaet Goettingen Stiftung Oeffentlichen Rechts UGOE Germany
5. Agencia Estatal Consejo Superior de Investigaciones Científicas CSIC Spain
6. Centre National de la Recherche Scientifique CNRS France
7. Imageau SAS IMAGEAU France
8. The Chancellor, masters and scholars of the University of Cambridge UCAM United Kingdom
9. Vibrometric Oy Cosma VIBROMETRIC Finland
10. Imperial College of Science, Technology and Medicine IMPCOL United Kingdom
11. Eidgenoessische Technische Hochschule Zurich ETH Switzerland
12. KLOE SA KLOE France
13. Karlsruher Institut fuer Technologie KIT Germany
14. Bureau Veritas. Registre International de Classification de Navires et d'Aernofes SA BV France

15. The Israel Electric Corporation Limited IEC Israel
16. Martell Lamolla Meritxell MERI Spain
17. Lapidoth Israel Oil Prospectors Ltd LAPIDOTH Israel
18. Merience SCP MERI Spain

The internal members' area (share point) facilitates smooth communication and management of the project activities and provides a joint platform for the main project documents and reports. This is implemented by means of an internal area of the project, organized by BV and EWRE and which includes all relevant project documents. It is accessible by all partners who will be able to upload and download the documents. It will serve also as an overview of the outputs and results per partner and at the project level. It will include also details of project meetings as well as other managerial information and data. The coordinator of the internal members' area is EWRE. Additionally, members of the project usually communicate by email.

Project meetings are also held twice a year where members of the consortium meet and share the progress made.

External - TRUST stakeholders

The primary targets are:

1. Research institutes, universities or research programmes addressing CCS in Europe and worldwide (GeoEnergy Research Centre; UKCCS research centre; BIGCCS; Peter Cook Centre for CCS Research; CATO in the Netherlands; PTE CO2 Spain; Bastor 2 study in the Baltic), particularly addressing young researchers in these centres;
2. National institutions and authorities responsible for energy policies and strategies (e.g. CIUDEN);
3. Industry interested in CCS;
4. Civil society organisations interested in environmental matters (Bellona Foundation, ENGO Network, etc);
5. Broader international society interested in TRUST activities and results (Zero Emissions Platform, Carbon Leadership Forum, GeoNet, Global CCS Institute);
6. Past and current EU projects and partners of these projects dealing with similar topics to TRUST (e.g. IMPACTS, CO2QUEST, OCTAVIUS, etc)
7. European Commission institutions (DG Research, DG ENER, DG Climate Change, JRC).

A **stakeholder e-database** has been developed by the WP8 leader and with the assistance of all the project partners, mainly focusing on researchers and scientists in the field of CCS. It contains the contact data scientists at national and European level and will be used mostly to provide them with information regarding the training activities. The following data is included in the database:

- Full organization name
- Acronym
- Address
- Country
- Web site
- Stakeholder group (primary group 1-7)
- Contact person
- His/her position

- E-mail address
- Phone

4. Communication tools and channels

TRUST will develop and use the following communication tools and channels:

The Projects' visual identity

The integrated graphical image and corporate design will contain:

- Visual identity elements: logo, color, font.
- Templates for text documents and PowerPoint presentations with the visual identity were prepared and made accessible for all partners in the project.

Different logos were proposed at the beginning of the project and as a result of the voting between partners, the final TRUST logo is this one shown below:

FP7 guidelines regarding visual identity are respected as well. All TRUST partners adhere to the guidelines provided concerning the use and application of the visual identity, prepared by WP8 leader.

Project website

The TRUST project web site has already been established as one of the main dissemination tools (TRUST web site http://trust-co2.org) for the project towards the general public. The structure and design of the website was renewed and improved in 2015. The structure is currently as follows:

- Home
- About
- Project structure
- TRUST sites
- Consortium
- Associated Parties
- Publications
- Contact us

The coordinator is responsible for design of the web page structure and for coordinating its operation, checking the overall quality and completing the project section of the web site (i.e. editing the main content).

In order to increase visibility of the project, some partners have added a link to TRUST website on their own website. Ideally, all of them should do this.

Specific Website for TRUST training course

A specific website was created for the training course on CO2 sequestration in deep geological formations held from 19-21 October 2015 in Montpellier, France. The TRUST website had a direct link to: https://trustco2course.wordpress.com.
The structure of this website is as follows:

- Home: objectives, audience, venue
- Course: lectures, programme
- Scientific Committee
- Registration
- Accommodation
- Contact

A flyer was developed to announce the course contents, lecturers and organisers and to provide further information. A specific report summarizing the main features of the training course has been developed as part of WP9 deliverables.

Social media

A LinkedIn group and a twitter account have been set up to reach users of social media. Important results from the project implementation and events like training courses, project meetings, etc. will be communicated via social media. MERIENCE will co-ordinate these activities in which all project partners will be involved.

Video

A video describing and explaining the facilities at Heletz was shot. It shall be available in the project web site.

Project deliverables, articles and presentations

WP leaders are responsible for preparing the final deliverables, whilst the coordinator is responsible for uploading them to the intranet, website and EC portal. The main project deliverables are prepared as e-documents and are available on the web site.

A PowerPoint presentation of the TRUST project has been prepared by the coordinator in collaboration with the other WP leaders. It presents the following items:

- The consortium and each project partner,
- The project goals and objectives,
- Project activities,
- Project results and outcomes.

Project partners can also use the presentation on all relevant occasions (European conferences, meetings, etc.) to present the TRUST project. A poster was also prepared by the coordinator in

collaboration with WP8 leader and can be used by the partners. Partners will inform the coordinator and the WP8 leader about their dissemination activities.

Articles are prepared by the partners and published in relevant academic journals. Additionally, the results of TRUST activities are regularly presented at different conferences. Each project WP leader and also project partners should be involved in these activities.

5. Timetable of activities

The timetable of activities provides information on the action, tool or event to be undertaken, the type of audience targeted, responsible and involved partners, deadline and status.

Dissemination and communication plan

Event, tool, action	Type of audience	Partner responsible /involved	Deadline	Status	Observations
Project logo	N/A	EWRE	31/12/2012	Done	
TRUST Templates of text documents and ppt	N/A	EWRE	31/12/2012	Done	
Website	All	EWRE	31/12/2012	Done	Permanent task of updates
Brainstorming day in Trondheim	Scientists and industry	EWRE /BV	03/06/2013	Done	
Dissemination workshop *Strategies for CO2 transport*	Scientists	EWRE	04/06/2013	Done	
First training course in Göttingen, Germany	PhD students, MSc, post-docs	EWRE/	8-12/ 10/ 2013	Done	
EU CCS delegation visit to Australia (Melbourne)	Scientists and industry	EWRE / all WP leaders	09/03/2014	Done	
EC FP7 Projects: leading the way in CCS implementation Technical Workshop, London	Scientists	EWRE/UU	14-15/04/2015	Done	
Mailing list	N/A	MERI / all	15/06/2015	Done	To be regularly updated, particularly for next training course
Second training course in Montpelier, France	PhD students, MSc, post-docs	ITT/CNRS/MERI	19-21/10/2015	Done	
Joint film on CCS Heletz	All	EWRE	2015	Done	
Website for the training	PhD students,	MERI	2015	Done	

course	MSc, post-docs				
Social media	All	MERI	2015	Done	Permanent task of updates
Poster and presentation at TCCS-8 in Trondheim	Scientists and industry	EWRE / MERI	08/06/2015	Done	Poster and oral presentation
Energy Dialogue Event	All	MERI	18/11/2015	Planned	
European Geosciences Union (EGU) General Assembly	Scientists, students, media	EWRE/ UU/ ITT	17-22/04/2016	Planned	To submit presentations, posters
Third training course	PhD students, MSc, post-docs	ITT/MERI	June 2017	Planned	

TRUST meetings held from 2012

Meeting	Invited speakers	Date	Location
Kick off meeting	Meny Broid, legal advisor	13-14 /11/ 2012	Haifa, Israel
1st project meeting	Barry Breifeld, Class VI Solutions, Oakland, CA, USA	2-0/10/2013	Haifa, Israel
2nd project meeting		17-18/02/2014	Barcelona, Spain
3rd Project meeting	Derek Taylor, DMT Energy Consulting, Brussels Axel Liebscher, GFZ, Postdam, Germany	20-21/10/2014	Göttingen, Germany
4th Project meeting	Sirin Engen, Bellona, Norway Saida Engstrom, SKB, Sweden	19-20/05/2015	Uppsala