GreenSmith

PUBLIC

Communication and Dissemination plan

D6.2 REPORT – PUBLIC

WP6: PROJECT AND RISK MANAGEMENT, COMMUNICATION AND EXPLOITATION

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Version Management

VERSION	DETAILS
V1.0	Draft report for review by consortium members
V2.0	Report after review

Disclaimer

Executive Summary

This document presents the communication plan and activities of the GreenSmith project, reporting a master plan for all communication activities to be implemented during the project.

This deliverable contributes to the task 6.3 “Communication and dissemination plan” of the Work Package 6 “Project and Risks Management, Communication and Exploitation”. The task is led by Paul Wurth Italia with the contribution from all partners.

Contents

List of abbreviations

SEWGS	Sorption enhanced Water-Gas Shift
TRL	Technology Readiness Level
BF	Blast Furnace
DRP	Direct reduction process

1 Introduction

As part of WP6 - Project and Risks Management, Communication, and Exploitation - this deliverable outlines the plan and specific steps needed for an effective dissemination and communication of the project's outcomes. The presented Dissemination and Communication Plan will be the foundation for optimizing the impact of the GreenSmith project and its outcomes.

All of the tasks outlined in this deliverable are intended to involve, raise awareness of, and disseminate information regarding the project, its objectives, its funding source, and its results.

Building and maintaining efficient communication channels, identifying the stakeholders, and providing them with the most appropriate information are all crucial to achieving this goal. This activity will continue for the full 27-month project duration.

The plan addresses the following points:

1. Define the target groups and identify stakeholders;
2. Establish the communication objectives and the strategy to achieve those;
3. Create and maintain a list of targeted events, scientific conferences and fairs;
4. Create a list of dissemination and communication activities.

For each GreenSmith partner, this master plan will be the basis for their outreach and dissemination activities and in particular to:

1. Inform the public and targeted audiences about the communication actions;
2. Serve as a guide for the project partners to plan their individual communication actions
3. Define the related management, monitoring and reporting activities
4. Serve as a guide for any media and public relations activities in which the GreenSmith consortium is engaged.

The plan will be updated during the project to fine tune the dissemination & communication objectives in line with project results.

2 Background

GreenSmith will demonstrate the recovery of hydrogen from various steel gases with an advanced CO_2 removal technology in line with the recently published Net-Zero Industry Act.1.

The GreenSmith approach will enable Net-Zero Industrial state-of-the-art advanced steelmaking routes. Central to the project is demonstration of multiple integration routes, providing a robust foundation for both an engineering design package and a risk & waste management plan. This will ensure the replication potential and market diffusion following the TRL8 roll-out of the technology. These objectives will be achieved a by a collaborative effort in a well-aligned consortium that includes two needs-owners H2 Green Steel (Sweden) & Acciaierie d'Italia (Italy) who will guide the project's direction to address real-world challenges in the steel industry. Two technology suppliers Paul Wurth (Italy) & Kisuma Chemicals (Netherlands) who will contribute their cutting-edge expertise in CO_2 removal and hydrogen recovery. Lastly, two multi-disciplinary research organizations TNO (Netherlands) & SWERIM (Sweden) providing comprehensive research support to ensure a solid foundation for the project's success.

GreenSmith will advance the industrial readiness of H_2 use in steel making by achieving four essential Technology Maturation Objectives:

1. Demonstrating a two-fold increase of SEWGS productivity by utilising novel Himago™ adsorbents crafted with advanced shaping techniques;
2. Showcasing competitive performance in terms of sustainability and economics for two implementation cases through conceptual process designs, supplemented with full scale techno-economics and life-cycle analysis;
3. Achieving TRL5 demonstration of H_2-rich product streams recovery from mixtures of residual steel gas from the state-of-the-art Blast-Furnace (BF) route and novel CH_4- and H_2-based Direct Reduction Plant (DRP) route at a carbon capture rate >95% and CO_2 purity >95% on dry basis;
4. Establish a generic Basic Engineering Design Package and a comprehensive Risk & Waste Management plan to ensure the replication potential and expedited market diffusion following the TRL8 roll-out of the technology.

Through these objectives, GreenSmith propels the industrial readiness of hydrogen use in steelmaking, fostering a cleaner and more sustainable future in line with the object of the Clean Energy Transition Partnership goals.

3 Dissemination and communication strategy

Dissemination and communications activities are vital for the successful implementation of GreenSmith project. A specific analysis to identify target groups and to clarify the optimal strategy to reach them is presented below.

3.1 Who: Target groups and stakeholders

A preliminary list of target groups was already presented at proposal phase (TABLE 1) and is refined below:

TABLE 1. GreenSmith target groups pre-identified at proposal phase

Target	Why	Expectations	Key Message
Steel Industry	End Users	Implementation potential of SEWGS for DRP	Timeline to implementation
DRI suppliers	Looking to supply full green steel application	Learnings about impact add on technology	Integration and Carbon Reduction potential
Public authorities (EU, national, local scale)	Developing the regulatory framework; deciding on financial support; ensuring local support	Solutions to achieve climate goals (e.g. green deal); facts and figures of on verified emission reduction; showcasing priorities	Carbon Capture will play a role in future steel making practices
R&D community	Technology (catalysts, adsorbents) developers and validators; education of skilled workforce	R&D properly considered in the EU funding schemes; knowledge dissemination	Industrial actors are keen on early collaboration to climb the TRL scale
General public	Public acceptance is instrumental for climate mitigation solutions in industries;	Scientific evidence, clearly explained argumentation (through media coverage)	Industrial symbiosis is essential against climate change

- Science community:
    - Fellow researchers, PhD students, School graduates, Students & professionals RDI community
    - Hydrogen RDI community
    - CCUS RDI community
    - Sorbents and catalyst developers
    - Process technology experts
    - Other RDI project consortia, including the ones granted in the same call
- Industry community
    - Steel plant owners and Operators
    - Engineering, procurement, and construction (EPC) community
    - Blue hydrogen plant owners
    - European plant building & equipment
- Materials (sorbent and catalyst) manufacturers
- Research admin. and funding authorities
- Policy makers
- Investors
- Banks
- General public

The GreenSmith partners will update, define and refine the list of target groups. The target group list being developed will serve as a dissemination tool during the whole project duration.

3.2 How: communication strategy

The main dissemination & communication goals will be to spread awareness on the decarbonization of steel industry through the results and achievements of the GreenSmith project. The messages should be tailored to the target groups. The same message can be sent to different target groups, but the language should be appropriate for the target audience. A preliminary list of expected outcomes to be disseminated is shown below:

- Improved capacity of the SEWGS process due to innovative shaped adsorbent;
- The positive impact of Carbon Capture for future steelmaking;
- The positive impact of lowering the use of coal for future steelmaking
- Vision on building a TRL8 plant after GreenSmith

These and other messages that will be elaborated during the project will have an impact at different levels depending on the chosen target group. For instance, the messages to the general public will improve public perception and societal image related to GreenSmith technologies and future of steel making industry; the message to the end users will help improving the market uptake.

3.2.1 Dissemination and Communication responsibilities

In the GreenSmith project, PIT is leader of task 6.3 which relates to communication and dissemination activities, ensuring the proper information exchange within the consortium and support the full communication of the project's content and results.

On the other hand, the GreenSmith consortium partners have an essential role in the communication of project results. As such, all partners are fully committed towards an active public dissemination of the project results, which will be implemented mainly by making use of the project website and shared through all beneficiaries' communication channels (e.g. their own websites and LinkedIn pages, see next sections).

3.2.2 Dissemination and Communication tools

The GreenSmith project has identified and will exploit the following dissemination channels and tools:

TABLE 2. Dissemination and channels/tools

Means Channels	Objective Targets and quantifiable indicators
Scientific/technical publications and oral/poster presentations at conferences, symposia, seminars, workshops, etc.	• Peer-reviewed scientific journals for R&D progress in catalyst and adsorbent development (such as Applied Catalysis A, Applied Catalysis B, Catalysts), validation of technical runs, LCA results, process & macroeconomic modelling, etc (Chemical Engineering Journal, International Journal of Greenhouse Gas Control, Fuel etc). • Scientific conferences for R&D&I progress with focus on validated results at higher TRL (e.g. Greenhouse Gas Control Technologies (GHGT) conference
Liaison with EU communities	The consortium will seek liaison with most relevant EU communities on GreenSmith topics, including the relevant EU Technology Platforms (ETPs) such as Zero Emission Platform
Liaison/ collaboration with relevant projects	The consortium will seek liaison and collaboration with other decarbonization projects that could complement project activities and provide synergies, also to effectively disseminate project results

The communication tools already identified are reported in TABLE 3.

TABLE 3. Initial lists of communication tools

Main activities and channels	When	Means of verification
A dedicated, user- and mobile-friendly website. The open part of the website is used for both communication and dissemination of results. Public deliverables can be downloaded from the website	M6	At least 6,000 website views, 2,000 unique visitors' views by M27
Strong project identity, including the logo, branding style and templates (PowerPoint, Word) for all internal and external communication materials	M3	Logo, branding style and templates are used by all partners in communication materials and deliverables
Proactive use of social media networks (LinkedIn, YouTube, Twitter, etc.) by partners' account pages for distributing contents and enlarging GreenSmith community	M3-M27	News regarding GreenSmith are made available on each partner's webpage or LinkedIn account
Participation in events (physical and/or online), including distribution of leaflets	M6-M27	At least 3 events where materials are distributed
GreenSmith press release: dedicated press release to a network of journalists in Europe who are active in decarbonization of industries	M6-M47	Press release before the end of the project dedicated to a network of journal active in chemical processes and decarbonization of industries such as "Stahl und Eisen".

3.2.3 Project LOGO and identity

The GreenSmith project logo has been developed and it is shown in FIGURE 1.

FIGURE 1. GreenSmith project logo

The project logo will be part of all GreenSmith templates used for dissemination activities, contributing to the visual identity of the project.

3.2.4 Flyer/banners/posters

Different flyers or posters can be created in cooperation with the partners to advertise GreenSmith at different events along the project. A public poster presenting the project has already been prepared (FIGURE 2) and presented at the CETP Knowledge sharing Workshop in Oslo, Norway. This will be 1) uploaded in the upcoming project website and 2) updated along the project with key project outcomes.

A public presentation has also been prepared for presentation at the CETP Annual conference 2024. Key slides are reported in FIGURE 3. This presentation, together with all public D&C material produced during the project, will be uploaded on the GreenSmith project website.

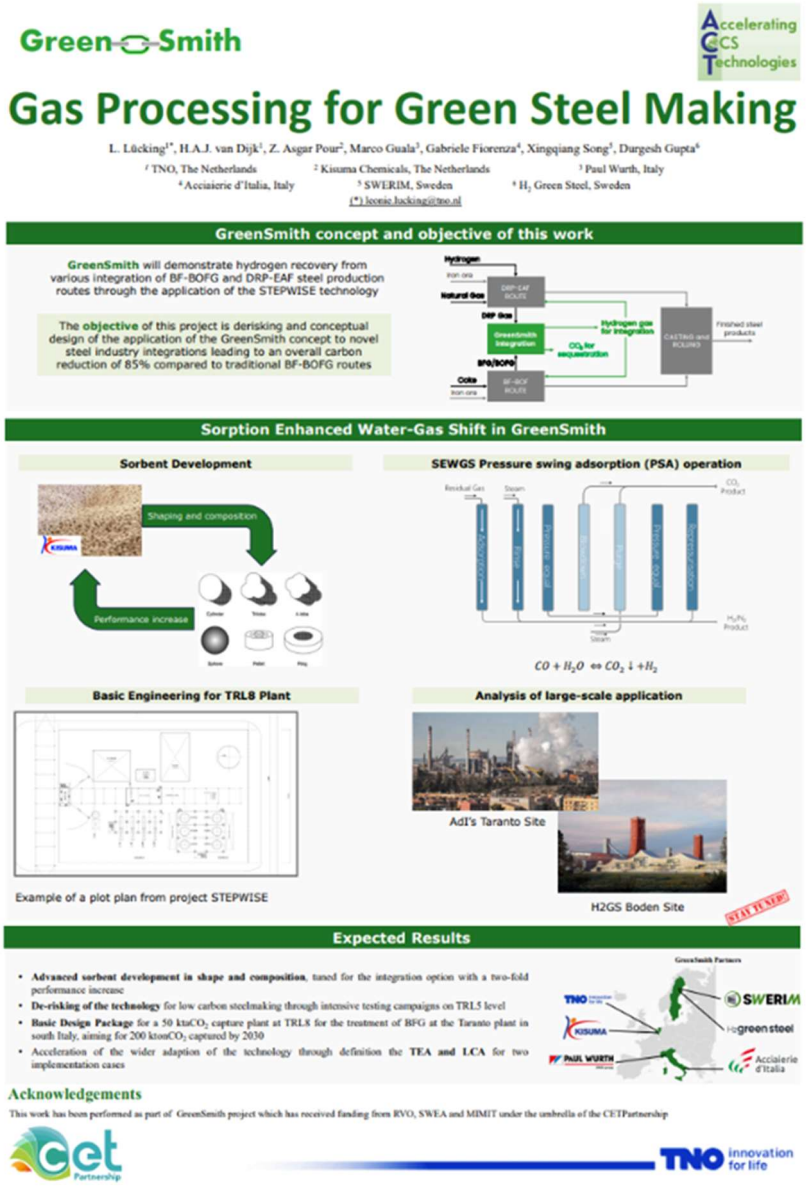
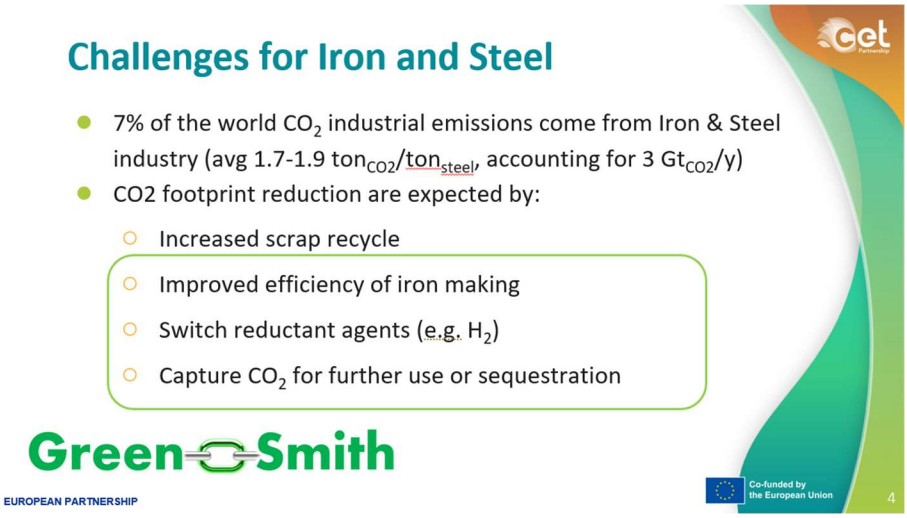
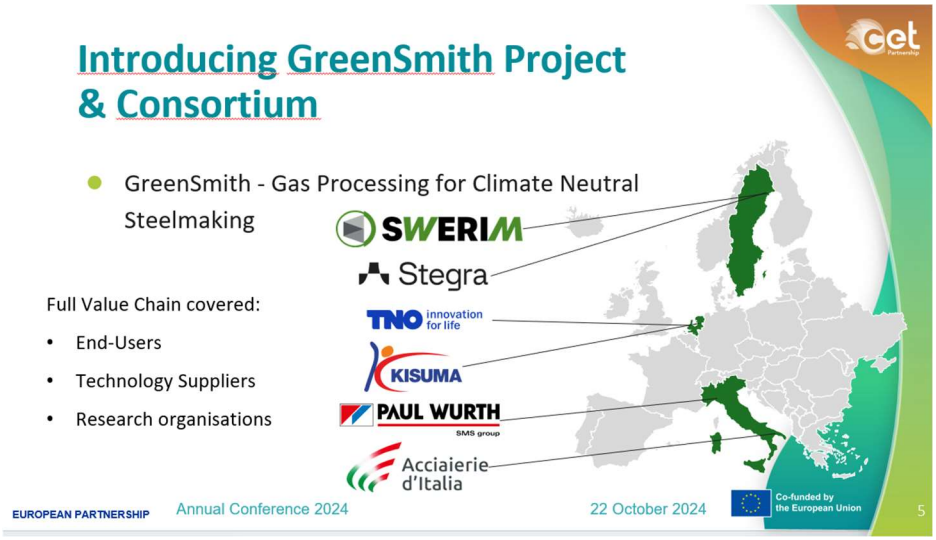
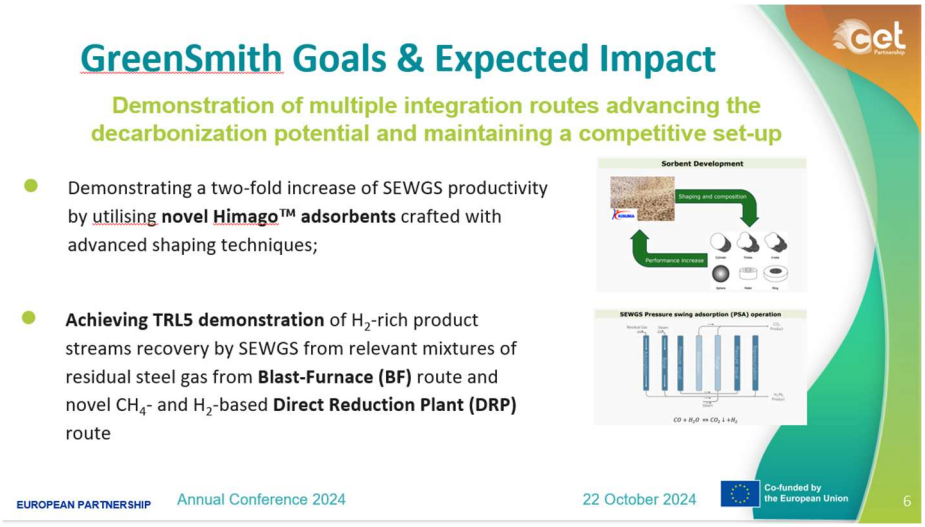


FIGURE 2. First public poster of GreenSmith







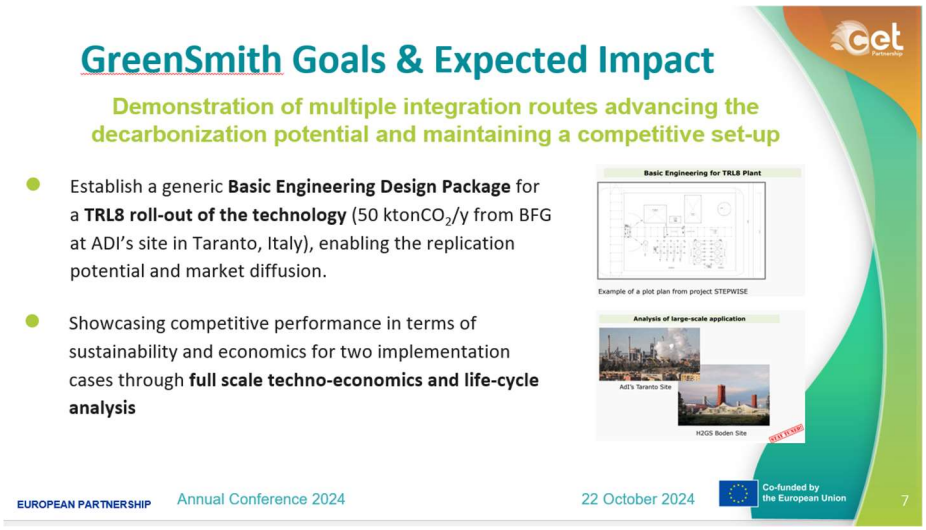


FIGURE 3. GreenSmith public sides already presented at 2024 CETP Annual Conference

3.2.5 Project website

The GreenSmith project website is currently being developed by TNO. The project website will be accessible at: www.greensmith-cetp.eu and will be online in M7.

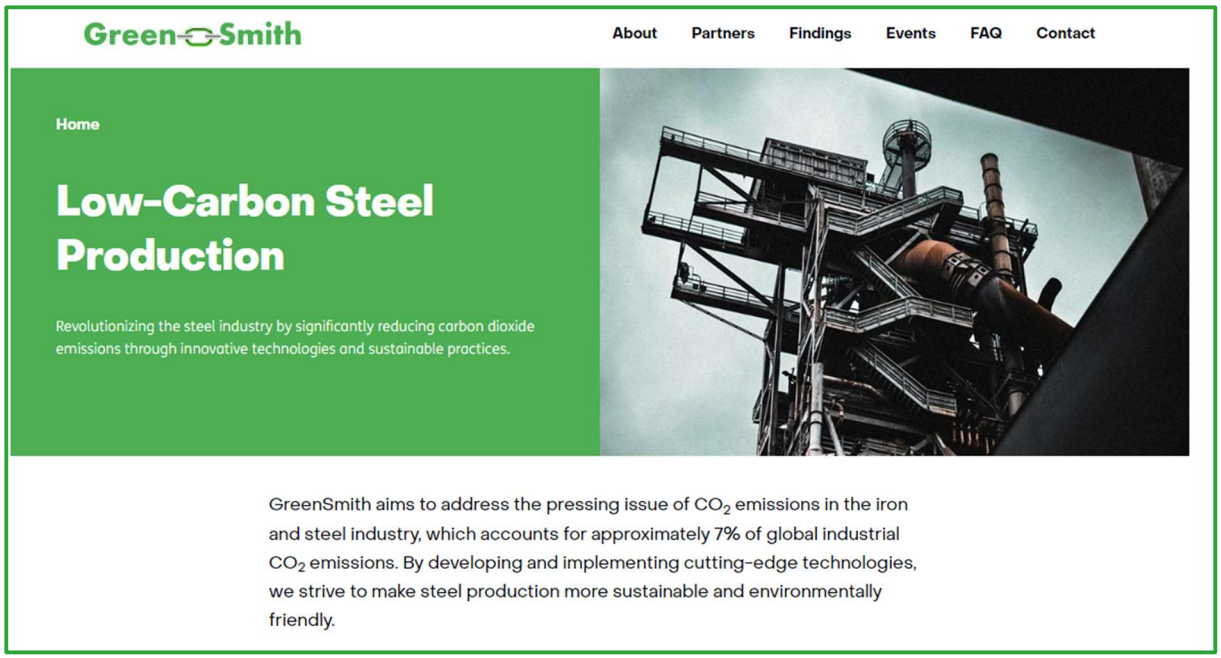


FIGURE 4. GreenSmith project website, home page

The website will be designed in order to present the project aims as well as the main activities and results to all interested stakeholders.

The role of the website in the communications strategy is to provide a place for people interested in the project to get more in-depth information about the project activities and results. The dedicated website will produce an extensive record of all publications and communications originated on the course of the project.

The main website sections and their sub-pages available to each user are listed below:

- Landing page
- About
- Partners
- Findings
- Events: Upcoming and past
- FAQ
- Contact

3.2.6 Scientific publications

As GreenSmith is a project with experimental validation up to TRL5, results can have high scientific interest and can be disseminated in the form of scientific peer-reviewed publications.

A list of potential journals where the results might be submitted for publication is given below:

TABLE 4. List or relevant journals

Journal	Website
Chemical Engineering Journal	http://www.sciencedirect.com/science/journal/13858947
Chemistry Letters	http://www.journal.csj.jp/chem-lett
Applied Energy	http://www.journals.elsevier.com/applied-energy/
Chemical Engineering and Processing: Process Intensification.	https://www.sciencedirect.com/journal/chemical-engineering-and-processing-process-intensification
Chemical Engineering Science	www.journals.elsevier.com/chemical-engineering-science
Energy	http://www.journals.elsevier.com/energy/
Fuel	http://www.journals.elsevier.com/fuel/
Fuel Cells Bulletin	http://www.journals.elsevier.com/fuel-cells-bulletin/
Fuel Processing Technology	http://www.journals.elsevier.com/fuel-processing-technology
Industrial & Engineering Chemistry Research	http://www.journals.elsevier.com/journal-of-industrial-and-engineering-chemistry/
International Journal of Hydrogen Energy	http://www.journals.elsevier.com/international-journal-of-hydrogen-energy/
Molecules	http://www.mdpi.com/journal/molecules
Applied Catalysis A: General	https://www.sciencedirect.com/journal/applied-catalysis-a-general
Applied Catalysis B: General	https://www.sciencedirect.com/journal/applied-catalysis-b-environment-and-energy
Catalysts	https://www.mdpi.com/journal/catalysts

All publications by GreenSmith partners will be collected and recorded in dedicated tables which are prepared and attached to this deliverable as TABLE 6 in APPENDIX I.

3.2.7 Events list

Besides scientific publications, a list of conferences and other relevant meetings where the project might be presented to different stakeholders by project partners is listed below and will be updated and confirmed by the whole Consortium.

TABLE 5. List of relevant events initially identified for GreenSmith Dissemination & Communication activities

Name	Event date - Start	Event date - End	Event location
CETPS Annual conference	22/10/2024	23/10/2024	CETPartnership Event- and Matchmaking platform
ABM Week	2025-09-02	2025-09-04	São Paulo, Brazil
Future Steel Forum	2025-07-01	2025-07-31	Bilbao, Spain
14th China International Steel Congress	To be communicated	To be communicated	To be defined
METEC South East Asia	2025-09-17	2025-09-19	Bangkok, Thailand
ExpoAcero 2025	2025-03-24	2025-03-26	Monterrey, Mexico
Global Steel Dynamics Forum	2025-06-17	2025-06-18	New York, NY, USA
SEAISI Conference and Exhibition	To be communicated	To be communicated	To be communicated
Made in Steel	2025-05-06	2025-05-08	Mailand, Italy
ESTAD	2025-10-06	2025-10-09	Verona, Italy
EOSC & CTSI - 10th EOSC European Oxygen Steelmaking Conference & 7th Clean Technologies in the steel industry (CleanTech)	2025-05-20	2025-05-22	Vienna, Austria
IAS Steel Conference	2025-10-14	2025-10-16	Rosario, Argentina
NMD ATM	To be communicated	To be communicated	India
Middle east Iron and steel conference	To be communicated	To be communicated	To be defined
EASES 2025 - 6th European Academic Symposium on EAF Steelmaking	2025-06-11	2025-06-13	Ljubljana, Slovenia
Estep annual event	To be communicated	To be communicated	To be defined
Fastmarkets: International Iron Ore	2025-06-17	2025-06-19	To be communicated

& Green Steel Summit 2025			
Alacero Summit	2025-10-14	2025-10-15	São Paulo, Brazil
Conference Brazilian Steel	2025-08-12	2025-08-13	São Paulo, Brazil
MetalExpo	2025-09-01	2025-09-30	Istanbul, Turkey
SteelOrbis New Horizons in Steel Market	To be communicated	To be communicated	Istanbul, Turkey
Kallanish INTERNATIONAL STEEL SCRAP	To be communicated	To be communicated	Istanbul, Turkey
3rd European Green Steel Summit 2025	2025-03-25	2025-03-26	Germany
8th CO2 Value Days & General Assembly	To be communicated	To be communicated	France

All attended events, together with other D&C activity, will be collected and recorded in dedicated tables which are prepared and attached to this deliverable as TABLE 7 in APPENDIX I. Events which have been already attended during this initial phase of GreenSmith are listed in Table 7.

3.3 Internal Communication

A private server for document exchange for the GreenSmith project has been prepared (FIGURE 5) and shared with the GreenSmith consortium. Its access is limited to project partners and is devoted to improving the communication within the consortium and ease of sharing documents during the project implementation.

The GreenSmith internal project platform is available since October 2024. This private area has been created in Microsoft Teams, with name “PWIT0-TM-Greensmith”. The team is accessible via Teams App or via web.

The main GreenSmith folder is divided into 7 subfolders: General, WP1, WP2, WP3, WP4, WP5, and WP6. Each WP folder is divided with the same subfolders:

- Actions: to have track of open and closed actions within each WP
- Deliverables: to allow drafting deliverable documents from different contributors in parallel if needed and to store the finalized, submitted deliverables.
- Follow-up: to upload documents following-up and supporting specific topics of the WP
- Material exchange: to share documents and general information among partners
- Meetings: to keep track of WP meetings (or consortium meetings for the case of WP6 Coordination)
- Milestones: to upload the reports and other documents supporting the achievement of specific WP related milestones

- Risks: To update risk table and mititigation actions per WP
- Press release and project logo: specific to WP6, to document press releases and store project logo
- Project template: specific to WP6, it contains the word and ppt templates that will be used in the project

Subfolders are created where needed by WP leaders and task leaders.

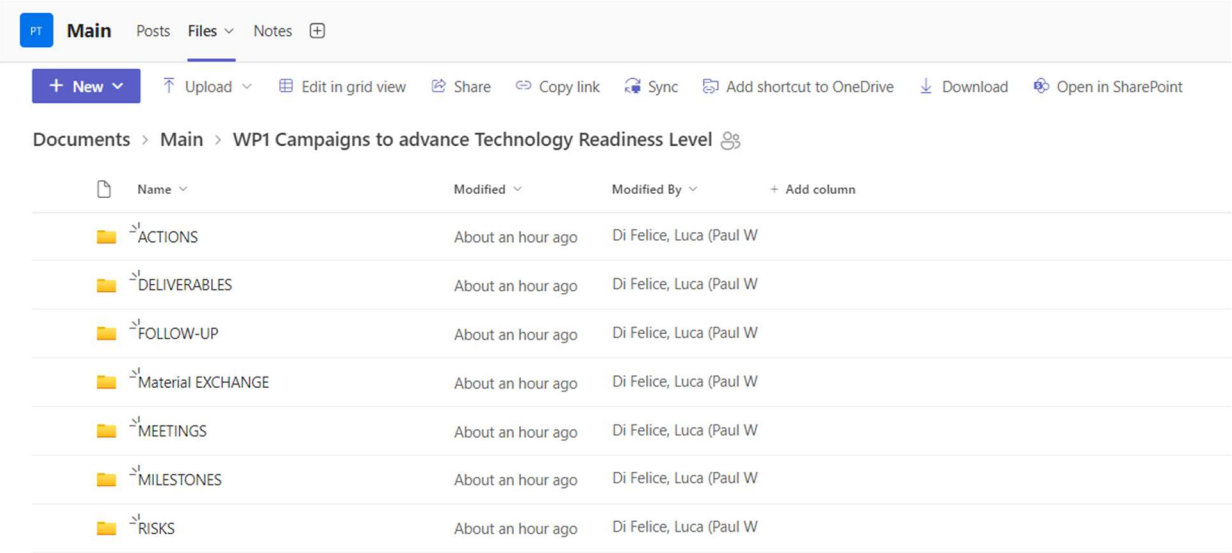


FIGURE 5. Teams SharePoint available for all project partners as internal communication tool

4 Conclusions and future steps

This communication plan helps defining the target groups, the communication contents and the implementation of the communication and dissemination strategy. The aim is both to create awareness about the project and its results as well as to engage with the project stakeholders.

This plan will also be updated regularly to include additional channels or target groups identified by the consortium.

APPENDIX I Dissemination follow up

The tables below are intended to report and keep track of all the dissemination initiatives at the partners' level to be updated each six months.

TABLE 6. Scientific publications table

Type of scientific publication	Title	DOI	ISSN or eSSN	Authors	Title of the journal or equivalent	Number, date	Publisher	Year	Pages	Public & private participation	Peer review	Is/Will open access provided to this publication
[Article in journal] [Publication in conference proceeding /workshop] [Books/Monographs] [Chapters in books] [Thesis/dissertation]	[insert title of the public ation]	[insert DOI refer ence]	[insert ISSN or eSSN number]	[insert authors' name(s)]	[insert title of the journal]	[insert number of the journal] [insert month of the publication] [insert year of the public ation]	[insert name of the publisher]	[insert year of the publication]	[insert first page of the public ation] - [insert last page of the publication]	[YES] [NO]	[YES] [NO]	*[Yes - Green OA [insert the length of embargo if any]] [Yes - Gold OA [insert the number of processing charges in EUR if any]]* [NO]

TABLE 7. Dissemination and communication activities

Type of activity	Main leader	Title	Date	Place	Type of audience	Estimated number of persons reached	Countries addressed
Organisation of a Conference] [Organisation of a workshop] [Press release] [Non-scientific and non-peer reviewed publications (popularised publications)] [Exhibition] [Flyers] training] [Social media] [Web-site] [Communication campaign (e.g radio, TV)] [Participation to a conference] [Participation to a workshop] [Participation to an event other than a conference or workshop] [Video/film] [Brokerage event] [Pitch event] [Trade fair] [Participation in activities organised jointly with other H2020 project(s)] [Other]					[Scientific Community (higher education, Research)] [Industry] [Civil Society] [General Public] [Policy makers] [Medias] [Investors] [Customers] [Other]		
Participation to a conference	TNO	Gas Processing for Green Steel Making	11-12/09/2024	Oslo, Norway	Scientific, Industry	100	EU countries
Participation to a conference	PIT	The GreenSmith Project	22/10/2024	Online	Scientific, Industry	100	EU countries