

D8.1 – Communication and Dissemination Plan

DelHyVEHR – WP8 - Communication, Dissemination and Exploitation



Document status

Name of deliverable: Communication and Dissemination Plan

Organisation and lead author: ERIG, Dr. Tobias Weide and Hans Rasmusson

Contributing Organisations: -

Due date: 30/06/2024

Delivery date: 08/07/2024

Dissemination level: PU: Public
 SEN: Sensitive

Date	Version	Author/Organisation	Changes Marked
27/06/2024	V1	Tobias Weide / ERIG	First draft
27/06/2024	V2	Laurence Naiglin / BENKEI	Quality check
05/07/2024	V3	Tobias Weide / ERIG	Second draft
08/07/2024	VF	Laurence Naiglin / BENKEI	Final version

Document validation prior to upload:

Validation by	Name of Reviewer/organisation	Date	Status
Internal reviewer	Hans Rasmusson / ERIG	27/06/2024	Ok
WP Leader	Tobias Weide / ERIG	27/06/2024	Ok
Project management team	Laurence Naiglin / BENKEI	27/06/2024	Ok
Coordinator	Florian Jalia / ENGIE	08/07/2024	Ok

List of content

Document status	2
List of content	3
List of figures	3
List of tables	4
1 Executive summary	5
2 Description of Work	6
2.1 Methodology.....	6
2.2 Target Groups.....	6
2.3 Communication Channels.....	8
2.3.1 Visual identity.....	8
2.3.2 Project Website.....	9
2.3.3 Graphic Material.....	10
2.3.4 Social Media and Professional Networks.....	11
2.3.5 Public Relations.....	11
2.3.6 Showcase and Visits.....	11
2.4 Dissemination Activities.....	11
2.4.1 Synergies with Ongoing Projects.....	12
2.4.2 Publications and Media Impact.....	12
2.4.2.1 Peer-Reviewed Publications.....	12
2.4.2.2 Media Impact.....	13
2.4.3 Conferences, Events, and Fairs.....	13
3 Conclusion	15

List of figures

Figure 1: DelHyVEHR logo.....	8
Figure 2: DelHyVEHR “D” logo.....	8
Figure 3: DelHyVEHR Website Frontpage, part 1.....	9
Figure 4: DelHyVEHR Website Frontpage, part 2.....	10

List of tables

Table 1: DelHyVEHR target groups.....	6
Table 2: Colour scheme of the project.....	8
Table 3: Potential journals for dissemination	13
Table 4: Planned, suitable and visited conferences for the DelHyVEHR project	14

1 Executive summary

The DelHyVEHR project aims to advance hydrogen technology by focusing on the development, demonstration, and dissemination of a Liquid Hydrogen Refuelling Station (LH₂ HRS). The project's success relies, besides technical developments, also on the effective communication and dissemination of its findings, innovations, and outcomes. This communication and dissemination plan is designed to ensure that the project's results are widely shared and actively used to inform policy, drive industry adoption, and increase public understanding for hydrogen technologies. The communication and dissemination plan is structured around the following key objectives:

1. **Effective Communication:** To ensure clear and impactful communication of the project's progress, outcomes, and benefits to all relevant stakeholders. This includes developing targeted messaging for different audiences, from technical details for industry professionals to more accessible information for the general public.
2. **Broad Dissemination:** To maximize the reach and impact of the project's findings through a wide range of dissemination activities. This involves publishing results in scientific journals and presenting at conferences to reach a global audience.
3. **Stakeholder Engagement:** To actively engage a diverse group of stakeholders throughout the project's lifecycle. This includes policymakers, industry stakeholders, technology providers, the general public, and the academic community. Ongoing engagement ensures that stakeholders are kept informed and involved in the project.
4. **Raising Awareness:** To increase awareness of the LH₂ HRS demonstration plant and its significance in advancing hydrogen technology. This involves organizing public events, creating media content, and leveraging social media to highlight the project's achievements and its potential impact on sustainable energy solutions.
5. **Collaboration:** To create synergies with other related projects and initiatives, thereby enhancing the project's impact. This includes collaborating with other EU-funded projects, industry groups, and research institutions to share knowledge, best practices, and resources.

The plan adopts a strategic approach to achieve its objectives by implementing a comprehensive methodology. By identifying and focusing on key target groups such as policymakers, industry stakeholders, technology providers, the general public, and the academic community, the plan ensures that communication efforts are made to meet their specific needs and interests. To effectively reach and engage these diverse audiences, the plan utilizes a variety of communication channels. These include the project website, graphic materials, social media, public relations efforts, and showcase events. Additionally, a comprehensive set of dissemination activities is outlined. This includes collaborations with ongoing projects, publications in scientific and industry media, participation in conferences and fairs, and the organization of project-specific events.

Enhanced visibility and awareness of the DelHyVEHR project will be achieved, highlighting its contributions to advancing liquid hydrogen refuelling technology. Furthermore, the plan aims to generate a greater public understanding and support for hydrogen technologies.

This communication and dissemination plan is a dynamic document that will be continuously evaluated and updated.

2 Description of Work

The description of work provides a detailed outline of the specific tasks and activities that will be undertaken to achieve the objectives of the communication and dissemination plan. This section includes the methodology, target groups, communication channels, and dissemination activities.

2.1 Methodology

The methodology for the communication and dissemination plan is designed to ensure systematic execution. This plan outlines the key messages, target audiences, communication channels, and timelines. The plan will be revised and updated at months 6, 18, and 30, to ensure it remains relevant and effective as the project progresses.

A multi-channel approach ensures that the project's messages reach the intended audience effectively. This includes traditional media such as press releases and articles in newspapers and magazines, digital media including the project website, social media platforms, and email newsletters, and direct engagement through workshops, conferences, and public events.

Engaging with stakeholders on an ongoing basis is crucial to keep them informed and involved. Regular updates will be provided through social media posts and the project website. Periodic meetings with key stakeholders (External Advisory Board) will be organized to discuss project progress and gather feedback.

Regarding WP8 “Communication, Dissemination, and Exploitation” a key exploitable result was defined, as the establishment of a robust network comprising 7 Member States (7MS) that represent various facets of the gas industry, including transport, distribution, modelling, material science, and production. This network has a regular exchange of R&D activities between the consortium and industry stakeholders, thereby enhancing the collective expertise and innovation capacity. The focus on the North Sea region, particularly related to the maritime sector, underscores the strategic importance of this network. The exchange of knowledge and insights from R&D activities will facilitate advancements in maritime hydrogen applications, contributing to the decarbonization of this critical sector.

2.2 Target Groups

The main target groups for the DeHyVEHR project have been identified at proposal stage and are policymakers and regulatory bodies, renewable energy stakeholders and the gas industry, technology providers and manufacturers, the general public, and research and academia. The table below (Table 1) outlines these target groups, their roles, engagement activities, and potential partners and locations where project activities and collaborations might take place.

Table 1: DeHyVEHR target groups

Target Group	Description	Engagement Activities	Potential Partners and Locations
Policymakers and Regulatory Bodies	Shape legislative and regulatory frameworks for hydrogen technologies.	Conferences and presentations to inform about the project's progress and findings.	National governments, European Union, European Union Aviation Safety Agency (EASA), International Maritime Organization (IMO).

Renewable Energy Stakeholders and Gas Industry	Integrate liquid hydrogen technology into energy systems.	Establish partnerships, publish articles in industry magazines and journals.	ENGIE and SHELL targeting LH2 production and export (e.g., Rotterdam, Groningen, Fos Tonkin, Toulouse, Sines).
Technology Providers and Manufacturers	Develop and scale liquid hydrogen refueling technologies.	Direct engagement through conferences, exhibitions, and technical workshops.	Component suppliers (e.g., FIVES, AS, CESAME, Cryostar, MannTek), LS-LHRS manufacturers (e.g., ArianeGroup, HRS, Atawey, McPhy), infrastructure operators (e.g., Aéroport de Paris, CMA CGM).
General Public	Gain broader support and acceptance of hydrogen technologies.	Create accessible content (videos, infographics, blog posts), public events, and demonstrations (e.g., open days at the demonstration plant).	Local communities around demonstration plants and refueling stations.
Research and Academia	Disseminate scientific knowledge for further research and innovation.	Publish findings in peer-reviewed journals, present at academic conferences, organize academic workshops and seminars, collaborate with research institutions.	Research institutions, academic conferences (e.g., European Hydrogen Energy Conference).
LS-LHRS Value Chain Actors	All actors involved in the liquid hydrogen refueling station value chain.	Engage component suppliers, LS-LHRS manufacturers, LS-LHRS operators, ports, airports operators, HD vehicles manufacturers through collaboration and integration activities.	Component suppliers (e.g., Forvia, Plastic Omnium, Hexagon, NPROXX), LS-LHRS manufacturers (e.g., HRS, Atawey, McPhy), LS-LHRS operators (e.g., Air Liquide, TotalEnergies, ENGIE, Linde, Shell, BP), Ports (e.g., Hamburg, Barcelona, Antwerp, Rotterdam), airports (e.g., Milan, Paris, Toulouse).
HDV Manufacturers	Develop and utilize hydrogen technologies in heavy-duty vehicles.	Direct collaboration and technical integration.	Railroad manufacturers (e.g., Alstom, Siemens Mobility), aviation (e.g., Airbus, H2Fly), maritime (e.g., Norled, Fincantieri), HDV truck manufacturers (e.g., Nikola, Daimler).
Infrastructure Operators	Manage and operate key infrastructure for hydrogen technologies.	Collaboration and integration of hydrogen solutions in ports, airports, and train stations.	Operators (e.g., Keolis, RATP, COSCO Shipping), specific locations like Aéroport de Paris, ports of Hamburg, Barcelona, Antwerp, Rotterdam.
Safety and Standardization Bodies	Ensure safety and develop standards for hydrogen technologies.	Collaboration on safety regulations and standard development.	TÜV Germany, OIML TC8/SC6, ISO/TC 197, CEN/TC 268.

2.3 Communication Channels

2.3.1 Visual identity

The visual identity of the DelHyVEHR project is an important component of the communication and dissemination strategy. It serves as a visual representation of the project in a visually appealing and memorable way. Therefore the project logo is also a key element of our visual identity and is shown in Figure 1 and Figure 2. The logo is composed of the stylized text “DelHyVEHR” in a bold, sans-serif font. The text is primarily in a dark blue colour, later on described as Logo dark blue (#283583). Above the ‘V’ in “VEHR,” there is a graphic element that resembles a water droplet. This droplet is in a lighter shade of blue, later on described as Logo light blue (#009FE3). The droplet symbolizes liquid hydrogen, a key focus of the DelHyVEHR project. The use of a water droplet as a symbol for hydrogen is quite fitting, as hydrogen is a component of water. In addition to the droplet, there is an arrow incorporated into the design. This arrow represents the concept of delivery, aligning with the “Del” in DelHyVEHR, which stands for “delivery”.



Figure 1: DelHyVEHR logo



Figure 2: DelHyVEHR “D” logo

This visual identity appears to be part of the branding for the project, using specific colours that likely correspond to those mentioned in the provided colour scheme list. The colour scheme for the DelHyVEHR project was carefully selected and includes a range of colours from dark and light shades for text and background, to a variety of accent colours that add vibrancy and visual interest. The colours are as follows (Table 2):

Table 2: Colour scheme of the project

Description	Hex Code
Text/Background Dark 1	#000000
Text/Background Light 1	#F5F5F5
Text/Background Dark 2	#525252

Text/Background Light 2	#FFFFFF
Accent 1	#283583
Accent 2	#009FE3
Accent 3	#5E9079
Accent 4	#00CED1
Accent 5	#FBCE7D
Accent 6	#83287E
Hyperlinks un-used	#009FE3
Hyperlinks used	#8272AA

These colours are used consistently across all project materials to ensure a cohesive and professional appearance. To assist journalists and other interested parties in accurately representing the project, a press kit has been developed. This kit provides guidance on the projects visual identity, including the use of the logo and colour scheme. It also includes information on the funding guidance of Clean Hydrogen Partnership, UK Research and Innovation, the EU, and Swiss Confederation. The press kit can be accessed on the project website at DelHyVEHR under: <https://delhyvehr.eu/press-kit/>

2.3.2 Project Website

The DelHyVEHR project website, accessible at www.delhyvehr.eu, serves as the central hub for all communication and dissemination activities. The website is structured to provide comprehensive and user-friendly access to information about the project’s objectives, progress, and outcomes (shown in Figure 3 and Figure 4).

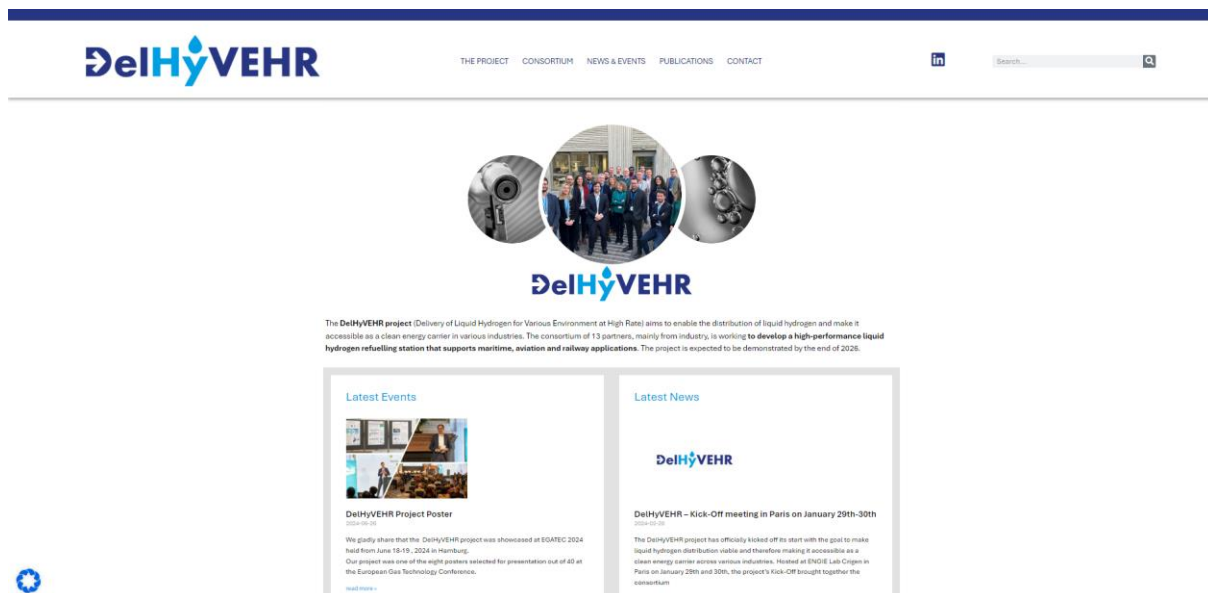


Figure 3: DelHyVEHR Website Frontpage, part 1

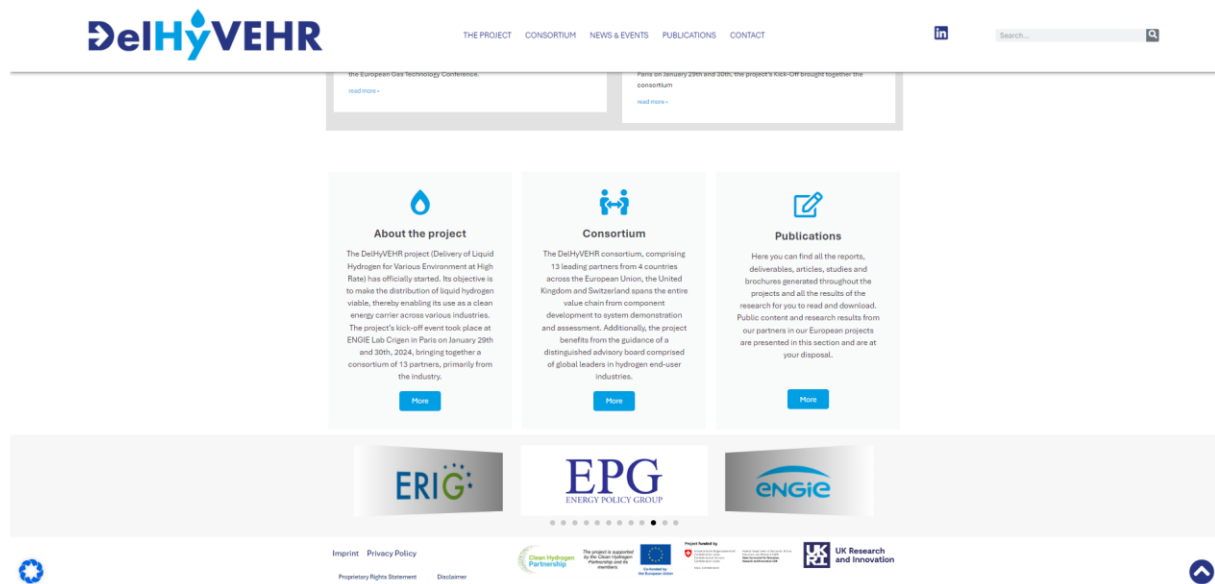


Figure 4: DelHyVEHR Website Frontpage, part 2

The homepage offers an overview of the project, featuring key highlights, recent news, and important updates. The "Project" section delves into the specifics of the project, explaining the scientific and technological advancements being pursued.

The "News" section keeps visitors updated with the latest developments, press releases, and media coverage, ensuring continuous engagement with the public and stakeholders.

A "Publications" section provides access to downloadable materials such as reports, brochures, and infographics. These resources are designed to facilitate information sharing and support stakeholder engagement through visual and written content.

The "Events" section lists conferences, workshops, and public demonstrations. This feature allows stakeholders to stay informed about opportunities to engage with the project.

Additionally, the website includes a "Contact" section, providing details for reaching out to the project team, and a "Consortium" section highlighting the consortium members, their roles, and contributions to the project.

The website is designed with user experience in mind, offering intuitive navigation, responsive design for various devices, and accessibility features to cater to a wide audience.

2.3.3 Graphic Material

High-quality graphic materials such as brochures, infographics, and posters will be developed to visually communicate the project's objectives, progress, and outcomes. These materials will be used at conferences, workshops, and public events to provide clear and concise information in an engaging format. For example, infographics illustrating the benefits and technological aspects of LH2 HRS will be created for distribution at industry fairs and public exhibitions.

A first project poster has already been created and pitched on the EGATEC conference in Hamburg from 16th to 18th of June. The poster is available under: <https://delhyvehr.eu/delhyvehr-project-poster/>

Additionally, a slide deck, presenting general information about the project (Objectives, Goals, Key facts like runtime and funding, WP structure, etc.) will be prepared.

2.3.4 Social Media and Professional Networks

The DeLHyVEHR project utilizes its LinkedIn page to effectively communicate with a professional audience. The LinkedIn page, accessible at DeLHyVEHR LinkedIn (<https://www.linkedin.com/company/delhyvehr/>), serves as a platform for disseminating project updates, news, and insights. The content shared on the LinkedIn page is carefully chosen to ensure it is relevant and engaging for the target audience. Regular updates include detailed posts about the project's deliverables, significant achievements, and technical advancements. For instance, posts may highlight successful demonstrations of the Liquid Hydrogen Refuelling Station (LH₂RS), visited events, or innovations achieved within the project.

The page also shares multimedia content, such as photos and videos from project events and workshops. These visual updates help to make complex scientific and technical information more accessible and engaging. Videos might include demonstrations of the LH₂RS technology in action, interviews with project experts, or highlights from key events and conferences.

The DeLHyVEHR LinkedIn page could host webinars and virtual events, providing opportunities for followers to learn more about the project, ask questions, and participate in discussions. These events are often promoted through dedicated posts and reminders, ensuring maximum participation.

Additionally, the LinkedIn page is used to share articles, research papers, and publications related to the project. These posts include summaries and direct links to the full documents, facilitating easy access to detailed information.

Interaction with followers is encouraged through comments and discussions on posts. Additionally, every partner of the consortium is encouraged to share, like and comment every DeLHyVEHR post. The project team actively monitors and responds to questions and feedback. This two-way communication helps to build a network of supporters and advocates for the project's goals.

2.3.5 Public Relations

Public relations efforts will focus on securing media coverage. Press releases will be issued to announce major milestones and achievements, and feature articles will be written for publication in relevant media outlets. E.g. the press release for the Kick-Off Meeting: <https://delhyvehr.eu/delhyvehr-kick-off-meeting-in-paris-on-january-29th-30th/>

Organizing interviews with project partners and stakeholders to discuss the project and its impact will also be a key activity. For example, issuing a press release to announce the successful demonstration of the LH₂RS and securing interviews with leading industry publications will help raise awareness and highlight the project's achievements.

2.3.6 Showcase and Visits

Organizing site visits and showcasing events at the demonstration plant will provide hands-on experience and direct engagement with stakeholders, allowing them to see the project's innovations in action. This will include organizing visits to the demonstration plant for stakeholders such as policymakers, industry representatives, and the general public. Hosting events at the demonstration plant to demonstrate the technologies and discuss their implications will also be key activities. This activity will be performed at a later stage of the project and once the demonstration plant can be visited.

2.4 Dissemination Activities

Dissemination activities are designed to ensure that the project's results are widely shared and accessible, maximizing their impact.

2.4.1 Synergies with Ongoing Projects

The DelHyVEHR project places emphasis on clustering activities, particularly through the collaboration with ongoing sister projects, also managed by ERIG. This collaborative approach is designed to enhance the visibility and impact of the project.

ERIG is actively collaborating with the Hy2Market and HEAVENN projects. Hy2Market aims to develop a robust hydrogen value chain across Europe, involving regions that are at the forefront of hydrogen innovation, such as the Northern Netherlands, Upper Austria, and Rhône-Alpes. This project addresses challenges in hydrogen production, transport, and usage, working towards integration with existing standards and legislative frameworks to support Europe's decarbonization goals by 2050. <https://hy2market.eu/>

The HEAVENN project, which also involves regions from the European Hydrogen Valleys Partnership, focuses on creating comprehensive hydrogen economies within specific European regions. This project aligns with DelHyVEHR's objectives by providing a structured framework for hydrogen deployment, from production to end-use in mobility and industry. <https://heavenn.org/>

In addition to these key projects, DelHyVEHR will explore potential collaborations with the "Hydrogen-powered aviation" project under the HORIZON-CL5-2023-D5-01-07 call. This initiative aims to advance hydrogen applications in aviation, presenting significant opportunities for synergies in technology development and policy advocacy.

The project also benefits from confirmed collaboration with the MethHyInfra project coordinated by the Physikalisch-Technische Bundesanstalt (PTB). MethHyInfra focuses on developing metrology infrastructure for hydrogen technologies, ensuring precision and reliability in hydrogen applications. With CESAME as a work package leader in both MethHyInfra and DelHyVEHR, this partnership facilitates seamless integration and knowledge exchange between the projects.

Moreover, ERIG maintains close contact with the EURAMETS Energy Gases Steering Committee to ensure future collaborations with related projects. These efforts are further supported by ERIG's network and existing activities, which include joint communication and dissemination strategies under the "Generation Hydrogen" project group. This includes collaborations with HIGGS, HyDelta 1, SuperP2G, and MefHySto projects, all of which share a common goal of advancing hydrogen technologies.

Finally, special emphasis will be placed on collaboration with the Zero Emission Waterborne Transport technology platform (ZEWTP). This platform is instrumental in promoting hydrogen technologies within the maritime sector, aligning perfectly with DelHyVEHR's objective of targeting maritime, aviation, and railroad sectors for focused dissemination and exploitation efforts.

2.4.2 Publications and Media Impact

Publications in peer-reviewed journals and media outreach are critical components of the DelHyVEHR project's dissemination strategy. These efforts ensure that the project's findings are reviewed, disseminated, and accessible.

2.4.2.1 Peer-Reviewed Publications

Publishing in high-impact, peer-reviewed journals is essential for validating the scientific and technical advancements. Suitable journals include (Table 3):

Table 3: Potential journals for dissemination

Journal	Scope	Impact Factor (2021)	Rationale
International Journal of Hydrogen Energy	The IJHE publishes papers on all aspects of hydrogen energy, including production, storage, utilization, and economics.	5.816	Given its broad scope and focus on hydrogen technologies, IJHE is an ideal platform for disseminating detailed technical and scientific findings from the DelHyVEHR project.
Journal of Power Sources	This journal covers research and developments in the field of batteries, fuel cells, supercapacitors, and other electrochemical energy devices.	9.127	With a focus on power sources, this journal is well-suited for articles detailing advancements in hydrogen refuelling station technologies and their integration with renewable energy systems.
Renewable and Sustainable Energy Reviews	RSER publishes reviews, original research articles, and thematic issues on renewable energy sources, including hydrogen technologies.	14.982	Publishing a comprehensive review or original research on the deployment and scalability of LH ₂ HRS technology in RSER will reach a wide audience and highlight the project's contribution to sustainable energy solutions.

Additionally, a white paper is planned, detailing the technical outputs for policymakers and local and European agencies. This document will present the project’s technological advancements, case studies, and projected benefits in a clear and accessible manner. A white paper is an authoritative report or guide that informs readers concisely about a complex issue, presenting the issuing body's philosophy on the matter.

The white paper aims to inform and influence policy decisions, shaping a supportive regulatory framework for hydrogen technology adoption. It will serve as a resource for agencies to understand the practical applications and implications of the project's findings, promoting broader implementation and alignment with strategic energy and transport goals.

2.4.2.2 Media Impact

To maximize the project's media impact various platforms and audiences are targeted. As already mentioned, regular press releases will be issued to announce significant milestones (at least on per year), such as the launch of the LH₂RS demonstration plant, major partnerships, and publication of key findings. These press releases will be distributed to industry journals, hydrogen technology magazines, and general news outlets. Engaging with popular industry blogs such as Hydrogen Fuel News or CleanTechnica can help reach a dedicated audience interested in hydrogen and renewable energy technologies. Guest articles, interviews with project leaders, and detailed project updates can be shared on these platforms.

2.4.3 Conferences, Events, and Fairs

Participating in conferences, events, and fairs provides opportunities to present the project’s results, network with other researchers and industry professionals, and raise the project’s profile. This will include presenting findings at industry and academic conferences, attending exhibitions to showcase the project’s innovations, and networking with other stakeholders to explore potential collaborations and partnerships. Examples for this kind of events are listed in the table below (Table 4).

Table 4: Planned, suitable and visited conferences for the DelHyVEHR project

Conference/Event	Date	Location	Type	Participants	Details	Website
EGATEC 2024	18/06/2022 - 19/06/2024	Hamburg, Germany	Poster Presentation	150 Industry professionals	Accepted for participation, contributing to industry dialogue.	www.egatec.com
GASTECH 2024	17/09/2024 - 20/09/2024	Houston, USA	Paper Presentation	Over 50,000 attendees	Accepted paper presentation, showcasing significant findings.	www.gastech.com
DVGW Kongress	17/09/2024 - 18/09/2024	Berlin, Germany	Exhibition	Less than 1,000 attendees	Upcoming exhibition focusing on industry engagement.	www.dvgw-kongress.de
Wind Meets Gas	03/10/2024 - 04/10/2024	Groningen, Netherlands	Exhibition	Less than 500 attendees	Upcoming exhibition targeting industry stakeholders.	www.windmeetsgas.com
ÖVGW Wasserstoff-Forum	06/11/2024	Vienna, Austria	Exhibition	Industry professionals	Upcoming event focusing on hydrogen technologies.	www.ovgw.at
Hydrogen Week and Programme Review Days 2024	18/11/2024 - 22/11/2024	Brussels, Belgium	Exhibition	Approximately 5,000 policy makers	Engaging with policymakers on hydrogen initiatives.	www.hydrogenweek.org
Hydrogen Convention	26/11/2024 - 27/11/2024	Linz, Austria	Exhibition	Industry professionals	Upcoming exhibition focusing on hydrogen advancements.	www.hydrogenconvention.com
European Fuel Cell Forum 2025	07/07/2025 - 10/07/2025	Lucerne, Switzerland	Presentation	Industry experts, researchers	Presenting advancements in fuel cell technologies relevant to hydrogen energy.	www.efcf.com
International Conference on Hydrogen Production 2025	15/09/2025 - 19/09/2025	Montreal, Canada	Paper Presentation	Global hydrogen industry leaders	Showcasing project findings on sustainable hydrogen production methods.	www.hydrogenproduction.org
European Sust. Energy Week 2025	23/06/2025 - 27/06/2025	Brussels, Belgium	Workshop	Policy makers, industry stakeholders	Workshop on integrating hydrogen into sustainable energy strategies.	www.eusew.eu

3 Conclusion

The communication and dissemination plan for the DelHyVEHR project outlines a strategy document that ensures the effective dissemination and communication of project results. By targeting stakeholders through various channels and activities, the project aims to raise awareness, strengthen collaboration, and maximize the impact of its outcomes in advancing liquid hydrogen refuelling technology. This plan will be continuously evaluated and updated to ensure it remains effective and responsive to the needs of the stakeholders and the project's progress.