



Hydrogen Valley in the Province of Mantova



Communication Strategy Dissemination and Exploitation Plan

March 2025



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co-financed by the I3 Interregional Innovation
Investments Instrument
EUROPEAN UNION

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A. Introduction

A.1 I3 INTERREGIONAL INNOVATION INVESTMENTS INSTRUMENT

Research and innovation are key for sustainable and smart economic transformation. They are central to the EU's main objectives such as the green and digital transitions.

This is why, in 2010, the European Commission called on national and regional governments to develop Smart Specialisation Strategies (S3) for research and innovation (R&I) to encourage all European regions to discover their competitive advantage. With Smart Specialisation, research and innovation are mainstreamed, for the first time, as tools for regional development.

More than decade later, the concept has taken hold strongly in EU regional policy. Participation, prioritisation and localisation, the key pillars of S3, have been fully absorbed in regional development practice.

Smart specialisation has made a real difference in the way European regions are designing their innovation strategies, reinforcing cooperation at all levels.

The three pillars of S3 can be described as:

- Localisation. Smart specialisation is a place-based approach, it builds on the assets and resources available on the territory.
- Prioritisation. S3 have to identify and concentrate resources on a limited set of areas, the so-called S3 investment priorities.
- Participation. S3 requires stakeholders from the quadruple helix (public sector, research, private sector and civil society) to engage throughout the strategy-cycle. Local actors need to support the definition, review, monitoring and implementation of S3 investment priorities.

Today, the Interregional Innovation Investments Instrument (I3), as part of the European Regional and Development Fund (ERDF), aims at supporting interregional innovation projects in their commercialisation and scale-up phases giving them the tools to overcome regulatory and other barriers and bringing their project to investment level. Two strands are implemented:

- Financial and advisory support for investments in interregional innovation projects.
- Financial and advisory support to the development of value chains in less developed regions.

The target group of the I3 Instrument are actors involved in smart specialisation strategies (S3) willing to work together for scaling up and bringing innovation to the market. I3 supports regions and their regional innovation stakeholders, well integrated in regional innovation partnerships that are addressing gaps in value chains related to S3 specific priority areas.

It is expected that the financial and advisory assistance contributes to accelerate the commercialisation and scaling up of interregional innovation projects having the potential to encourage the development of European

value chains. Investments are supported at high technological readiness level and help them address barriers to moving to market. The predefined thematic areas will enable scaling up and take to market innovative solutions that contribute to EU priorities without fragmenting available resources.

The progress in implementing the programme will be measured with indicators in the following dimensions:

- Interregional
- Innovation
- Investment
- Cohesion/territorial
- Value chain

In particular, the activities funded under the I3 Programme can be identified as a financial and advisory support for investments in interregional innovation projects in shared smart specialisation areas and for the development of value chains, notably including in less developed regions (Strand 2). Support available for both tangible and intangible investments:

- Development of portfolios of projects for close-to-market investments along value chains, involving innovative products and services through the deployment of new technologies or processes.
- Developing, connecting or making complementary use of testing and demonstration facilities to accelerate market uptake and scale up of innovation solutions in shared smart specialisation areas.

The thematic priorities can be summarized as (1) digital transition, (2) green transition, including climate neutrality, environmental sustainability and circular economy and (3) smart manufacturing.¹

A.2 HYMANTOVALLEY PROJECT

HYMANTOVALLEY was proposed to EU financing to demonstrate a replicable green hydrogen ecosystem in Mantova by implementing an integrated model of hydrogen production, storage, transportation and utilisation for heat, power and mobility. The project involves local communities and industries and takes advantage of a tri-modal transport system (water, rail and road) already working in Mantova Valdaro inland Port, based at the crossroads of two corridors of the Trans-European Transport Network (TEN-T) and is aimed at the decarbonization of a quite problematic area in Europe laying in the Italian Padany Plain. HyMantoValley is part of a broader programme for the establishment of the hydrogen valley in the province of Mantova, among the first in Europe, with a total expected investment of approximately €75 million. The objectives of the project can be summarized as:

¹ European Innovation Council and SMEs Executive Agency (EISMEA) webpage: I3 Instrument

- converting an existing grey hydrogen production facility (10 MW of PEM electrolysis producing ca. 1.500 t/y of hydrogen) absorbing energy from two planned photovoltaic and agro-voltaic plants (14 MW + 26 MW);
- pressurising the gas through new equipment connecting the plant through a new direct pipeline (length 3 km) with the inland port of Valdaro and the railway system;
- distributing hydrogen through a new HRS filling station installed at Valdaro Port to serve tri-modal transport means;
- distributing hydrogen to hard-to-abate industries through converted hydrogen trailers implementing innovative containerised and lightweight tanks;
- utilising hydrogen by two vessels to be refitted;
- utilising hydrogen to heat and power infrastructures.

Furthermore, the project wants to develop a centre of applied research focused on the optimisation and innovation of the hydrogen value chain and managed by relevant universities. It aims at creating synergies with other regional innovation ecosystems through knowledge exchange and utilising European technologies. It will also coordinate the use of the territory as a demonstration facility.

The current hydrogen production plant is based on the process of steam methane reforming (so-called grey hydrogen) of which some obsolete sections of the plant have been decommissioned. The reuse of the existing infrastructure will also lead to the reuse of the related systems (e.g. demi-water plant, necessary utilities infrastructure, compression section rooms, etc.), creating a best practice at European level for the reconversion of production from grey to green hydrogen. Part of the restructuring will be covered by tangible public and private investments through other funds.

In parallel the project will employ a new organisational method in business practices, territory organisation and external relations through a novel structure coordinating the hydrogen commercialisation and dissemination, including follower/customer territories amongst neighbour provinces and municipalities. This model includes a specialised digital twin connected to a larger monitoring process of the mixed energy grid.

A.3 PROJECT BENEFICIARIES

Province of Mantova, coordinator of the project, is a local public Body in charge of local planning, including energy and transport themes, secondary schools and maintenance of local roads. Recent activities have been focused on the rehabilitation of former industrial areas particularly on the development of the Valdaro inland port, connected to the Adriatic and to the main North-South European backbone, both serving food, oil, chemical and heavy industries. Province of Mantova has a longstanding experience coordinating and participating in European and National financed projects with a dedicated office. Within their public responsibility on energy

management, it is an active player of the Mantova Hydrogen Valley keeping relationships with other public Institutions, such as Lombardy Region and local Municipalities, as well as industries.

AGIRE Energy Agency, owned by Province of Mantova, is the technical support and also coordinator of the project. AGIRE promotes energy savings and the utilization of renewable energy sources on the territory, focusing on Local Authorities, SMEs, Farms and Households. AGIRE represents a guide towards the reduction of climate-altering gas emissions, the promotion of sustainable transports and raising of public awareness of sustainable economic development. Highly experienced in EU co-financed projects, AGIRE is the executive Agency of Province of Mantova for the realization of the environmental and energy aims on the local territory.

Is one of the largest Italian producers of hydrogen, has its production facility in Mantova and remotely controls the hydrogen production of other plants across Italy.

SAPIO Group is an international level hydrogen producer. It Performs 3000+ H2 deliveries/year by truck all over Italy, operates 15+ km of H2 pipelines and manages H2 production plants for specific industries. SAPIO is active on the national territory with many initiatives, concerning: import of green ammonia for the H2 sector; development of hydrogen valleys in different locations in Italy (Mantova, Marghera, Tuscany and Sicily) with hydrogen production plants powered by local renewable energy; implementation of hydrogen distribution systems with hydrogen pipelines to local hard-to-abate industries and mobility applications and with high pressure tube trailers (equal or above 500 barg) to innovative hydrogen refuelling stations. In Mantova they currently produce about 1.500 t/year of blue hydrogen (from steam methane reforming with a carbon capture system) and will be sided by a new modular PEM electrolyser for a total of 10 MW (5+5 MW), aiming at producing ca. 1.500 t/year of green hydrogen. In HyMantoValley project SAPIO is mostly engaged in production, storage and distribution of hydrogen, including pipelines and Hydrogen Refuelling Stations (HRS). They also focus on new ways of distributing hydrogen with containerised transportable high-pressure storage solutions applicable for several end-uses (buildings, off-grid applications, ships, trucks and trains). They finally study the realisation of the HRSs for the tri-modal system in Valdarò Port.

RENHIVE Srl is a company belonging to the **Renovo Bioeconomy group** acting as an aggregator of skills and technological, industrial and financial resources for sustainable development, based on the integration of local generation of renewable energy and innovative production initiatives. RenHive focuses on photo-voltaic and agri-voltaic fields design and implementation, acting as a green electricity producer. RenHive is called to invest for the realisation of a 13 MW plant and a 1MW accumulator which will provide stabilised 10MW green energy for daytime hydrogen production.

Wolftank, owned by Wolftank-Adisa Group GmbH, is member of the European Clean Hydrogen Alliance of the European Union. It is a leading technology subject in the field of energy solutions and environmental protection. Wolftank provides a mobile HRS with the purpose of testing the feasibility of a fixed station, while analysing

permits and authorisation requirements in the area of the inland port. They participate in the preparation of a techno-economic feasibility aimed at applying for funding in the NextGenEU.

VENA, Veneziana Navigazione e Rimorchio Srl, is a shipowner which operates in the sea port of Venice to provide several naval services. Amongst others, they operate a fleet of tug/pushers and barges which can navigate between Venice and Mantova along the artificial channels connected with the Po River. In the context of this project, they work with Future Proof Shipping to refit the tug/pusher Tanzania II from diesel to hydrogen providing shipyard services, studying the possibility to add green bow and stern-thrusters helping the manoeuvrability of barges and working with the business models team to analyse the technoeconomic feasibility and sustainability of the hydrogen refitting.

Future Proof Shipping is a team developing realistic and practical sustainable shipping solutions. Their aim is to have ten zero-emissions ship projects kickstarted within the next five years and are currently in the process of retrofitting an inland container vessel fuelled 100% by green hydrogen in the Netherlands. FPS provides technical and project development advice and support to enable VE.NA. to make the transition to zero-emissions shipping of the pusher Tanzania II, including retrofit design and engineering services.

IPE Locomotori 2000 Srl studies and designs locomotives to meet a wide range of requirements. They deal with major metal carpentry work and the dismantling, assembly and maintenance of rail vehicles. Their qualified personnel offer maintenance and control assistance to all types of rail vehicles. They sell two IPE-branded locomotives for cargo handling. In the context of this project IPE designs a new locomotion platform that can host several engines including hydrogen-based ones to be used in freight handling, particularly where it is not possible, or extremely difficult, to use electricity.

STRESS, Sviluppo Tecnologie e Ricerca per l'Edilizia Sismicamente Sicura ed Eco Sostenibile, is a no-profit consortium and technological district with the objective of promoting innovation as a qualifying element of a complex supply chain such as that of constructions. They have been designated by the Italian Ministry of University Innovation and Research as the implementing party of the High Technology District on Sustainable Construction and is now among the most accredited references in the construction innovation sector in Southern Italy. They worked with University of Sannio (affiliated in this project) to build a nearly Zero Energy Building of 71 sqm using hydrogen as the energy vector and with University of Molise (affiliated in this project). STRESS works in this project together with the Province of Mantova, to identify a public building (possibly a school) with the purpose to start using hydrogen as a substitutive energy. They also help identifying technology and supplier applicable in the local context.

They are finally in charge of the Replication of HyMantoValley experience in Campania Region with the identification of contexts and needs, incentives and barriers, with subsequent adaptation of the model.

Università del Sannio, affiliated Party to STRESS, offers specialised training courses with three main departments and bring their know how on the H-ZEB (Hydrogen Zero Emission Building) design through their Engineering department.

Università del Molise, affiliated Party to STRESS, offers a broad range of education paths and shares an inter-university on Civil Engineering with UNISANNIO. They bring their know how on the H-ZEB (Hydrogen Zero Emission Building) design through their Civil Engineering department.

UNIMORE, Università degli Studi di Modena e Reggio Emilia, is a historical university which has its main offices in Modena and Reggio Emilia and a branch in Mantova. In March 2022, UNIMORE established the new “Interdepartmental Centre for Research and Services in the field of Hydrogen Production, Storage and Utilisation” (H2-MO.RE). The Centre promotes and coordinates interdisciplinary studies and research in the field of hydrogen production, storage, transport and utilisation. Within the coordination of H2-MO.RE, several departments are involved in HyMantoValley: Department of Economics working on techno-economic analysis along the H2 value-chain and on simulations together with FBK; Department of Science and Methods for Engineering which owns a specialised tool for Lifecycle Analysis and works on Environmental Impact Analysis together with the CNR IIA; Department of Engineering working on planning of research and didactic activities and for preparing MSCA proposal for funds; Department of Physics Informatics and Mathematics developing the Digital Twin model and didactic activities. They all works also on planning the new Applied R&I Hydrogen Hub, together with FBK, to define a sustainable business plan and the educational programme.

FBK, Fondazione Bruno Kessler is the top Research Institute in Italy, ranked at number 1 for scientific excellence within 3 different subject areas and for the economic and social impact according to the latest quality of research ANVUR evaluation. Through 11 centres dedicated to technology and innovation and to the humanities and social sciences, FBK achieves outstanding results in the scientific and technological field with regard to the interdisciplinary approaches and the application dimension. The main department working on this project is the Centre for Sustainable Energy (SE) with a team involved in research and development of fully integrated solutions for hydrogen generation from renewable sources, safe hydrogen storage and efficient utilization by end users. FBK mainly works on Models/Scenarios, especially on understanding possible ways of levelling the cost of hydrogen, understanding the market barriers and providing knowledge on security and authorizations procedures. They also are in charge of planning the new Applied R&I Hydrogen Hub, together with UNIMORE, to define a sustainable business plan.

POLIMI, Politecnico di Milano is a public scientific-technological university which trains engineers, architects, and industrial designers. Research is provided in cooperation and alliances with the industrial system. Politecnico di Milano is part of the European and world network of leading technical universities and offers a wide range of degree programmes entirely taught in English. In HyMantoValley the **School of Architecture**

Urban Planning Construction Engineering, Mantova Branch, is involved to create the design plan of the new Applied R&I Hydrogen Hub, rehabilitating an otherwise abandoned area near the hydrogen production plant.

CNR IIA, Consiglio Nazionale per le Ricerche, Istituto di Inquinamento Atmosferico is the largest public research institution in Italy, under the Italian Ministry of University and Research. The IIA institute face the ecological transition by integrating skills and knowledge on monitoring and studying air quality to guarantee people's health and direct sustainable industrial policies and practices. CNR IIA works together with UNIMORE to conduct the Lifecycle Assessment within the Environmental Impact Analysis task.

EFIP, European Federation of Inland Ports is the only representatives voice of inland ports in Europe. It highlights and promotes the role of inland ports as nodal points for intermodal transports combining roads, rails, maritime and inland waterways. They actively follow the developments of the EU Institutions environmental policies in the field of EU transports, particularly related to inland ports. EFIP presents common positions on European policy issues relevant for inland ports and their economic and business environment. EFIP will participate in this project for activities linked to the H2 Ecosystem, being hydrogen-based naval transport part of the HYMANTOVALLEY project.

B. Communication Strategy for the HYMANTOVALLEY Project

B.1 GENERAL CONTEXT AND COMMUNICATION STRATEGY

Communication is a key point in the implementation of activities devoted to the local sustainable development and this is particularly true in the case of EU funded projects. Communication Strategy is based on a Communication and Dissemination Plan setting out actions and activities to be developed and undertaken by the project partners during the project lifetime and over. Planning includes reasonable timetables and is reviewed and updated regularly.

Working on "Communication and Dissemination" comprises predictably activities to be implemented as "Communication" and other as "Diffusion", being many of them on the border line.

We can roughly define recommended Communication and Dissemination activities as follow:

Communication Activities

- Identification of Target Groups
- Identification of key messages
- Website & Social Media
- Publicity material (posters, brochures, leaflets, flyers, videos, etc)

- Press Conferences
- Press Articles
- Scientific Articles

Dissemination Activities

- Identification of Target Groups
- Identification of key messages
- Networking: Communities, Policy Makers, Stakeholders and Experts engagement
- Organization of events with groups of interest
- Participations in Fair & Exhibitions and other relevant Events

In HYMANTOVALLEY project Communication, Dissemination & Exploitation strategy, together with the activities implemented, are planned and supervised by a **Dissemination Board**, composed by the Project Manager, the Communication Manager and the WP7 Leader. The Board reports (and is subordinate only) to the **Management Board**, in charge of the development of all the project activities.



Strategies, actions and activities are checked and updated continuously during the implementation of the project, changed or substituted depending on the circumstances and on the feedbacks from the partners and the stakeholders: in this case the Project Manager informs immediately the Project Officer for a confrontation. However minor problems can be solved on the base of the regulations stated in the Risk Management Plan. All the activities implemented are summarized and collected in a convenient Excel file:

HYMANTOVALLEY - COMMUNICATION AND DISSEMINATION ACTIVITIES								
Newsletter	Mailing List	Press Release and Press Conferences	Press - Web Articles & Videos	Other Diffusion Activities on Brochure, Mag, etc.	ICT Programmes Web & News	EU Events participation	Other Events participation	ICT Programmes
Newsletter 1 (06/2024)	Mailing List AGRIE Hydrogen Stakeholders - 200 Contacts (06/2024)	Press Release 1 Mantova (26/09/2023)	Gazzetta di Mantova (27/09/2023)	Federame Brochure 2024	Project Summary on ICT Progr. Web & News (12/2024)	Covent of Mayors Annual Event	Connecting EU Days - Brussels (2-5/04/2024)	Coordinat Brussels (
Newsletter 1 (12/2024)	Mailing List AGRIE Hydrogen Stakeholders - 400 Contacts (12/2024)	Press Release 2 Mantova (10/2024)	Gazzetta di Mantova (06/04/2024)	Federame Website Best Practices (2024)		EnergyCities Annual Conference Workshop	RENABEL Italian Energy Agencies Association Annual Assembly Workshop (2025)	
Newsletter 1 (06/2025)	Mailing List AGRIE Hydrogen Stakeholders - 600 Contacts (06/2025)	Press Release 3 Mantova (04/2025)		ManagEnergy Website (2025)		EUSEW Sustainable Energy Week Brussels 2025	World Hydrogen & Renewables Italy	
Newsletter 1 (12/2025)	Mailing List AGRIE Hydrogen Stakeholders - 800 Contacts (12/2025)			Federame Brochure (2025)		EU Green Week 2025	Farma Green Week - Green Economy Festival	
Newsletter 1 (06/2026)	Mailing List AGRIE Hydrogen Stakeholders - 1,000 Contacts (06/2026)					Federame Annual Event		
Newsletter 1 (06/2026)								

B.2 COMMUNICATION PRINCIPLES

The Communication Plan

A Communication & Dissemination Plan provides to emphasize aims and results of the projects at a local, regional, national and international level through the following steps:

- ◆ Identification of the Goals of the communication strategy
- ◆ Identification of the target audience
- ◆ Identification of the key messages
- ◆ Selection of the communication channels
- ◆ Description of detailed activities to be undertaken and materials to be used
- ◆ Description of partnerships
- ◆ Provide an implementation Plan
- ◆ Inclusion of measures for evaluation and revision of the Plan

Setting goals

The goals of the Communication & Dissemination Plan have to be determined by the overall objectives and nature of the project.

An I3 project should have, as its main aim, the communication of information about the investments to be realized to the relevant industrial sectors involved, to the policy-makers and to the communities who may be affected by the project.

Target audiences

Defining the target audience depends logically from the aims of the project. Specifically, if the main target audience is the industrial sector for which the project work is most relevant, it is necessary to describe and evaluate the sector: how many operators are there? What are their main characteristics? What knowledge and attitudes do they have? What are their hydrogen needs, if they have? Which barriers are there to reach them? To realize the ambitious goal to achieve significant emissions reduction, how many hard-to-abate companies

are there in the local industrial sector and which global effort is requested to reach them? In our case we have additional Targets as policy-makers and local communities with their needs and barriers to go beyond.

Defining messages

Once the target audience is defined, key messages can be identified, too. These depends on the nature of the target audience. There will be a range of messages addressed to different audiences, with message content tailored in each single case. Generally speaking, it is necessary to:

- Show the importance and relevance of the issue
- Link messages to specific audience values, beliefs or interests
- Understand what motivates the audience and modulate the message
- Be culturally relevant and sensitive
- Create clear and memorable (possibly) messages with a few key words

Identifying channels

Communication channels represent the means messages are sent to the members of the target audience. Today there is an exceptionally wide variety of possible channels: mass media (television, radio, newspapers); specialised channels (technical or research publications, trade journals, industry conferences, specialised websites); direct channels (letter writing, direct contact with relevant decision-makers); reference channels (online or offline directories and catalogues), social media (Linkedin, Facebook, Instagram, Twitter, etc.) and many others.

Choice of channels should link the audience and the message. If the objective is to reach decision-makers in a local Authority, for example, the most suitable channels can be considered: personal letters, meetings, presentations, etc.

Planning the Communication activities

This section of the plan will contain specific information about how selected channels have to be used to address key messages to the different target audiences. It contains information about materials, budget, timings and responsible persons. For example, for the participation in a relevant industry conference, presentations need to be prepared, along with collateral materials such as leaflets, samples, information packages, exhibition stand and so on. These items need to be budgeted and produced in time.

Cooperation

For most EU projects cooperation offers a mean where all project communication activities can be amplified. For example, if a project offers significant benefits for a local community, beneficiaries from different projects, operating within that specific community, may be interested in joining efforts. This interaction could generate co-sponsored events, on-site common visits, with the task that each collaborating organisation can provide information to the members of the community or network.

Cooperation can also take the form of exchanged banners on reciprocal websites, for example, just to increase the online project profile on more than a website. Communication Plan will consider potential cooperation in both geographical and thematic terms. Collaboration with other project organisations or beneficiaries is relevant for the mutual benefits that can arise.

Plan implementation

This part of the plan sets out specific actions to be taken and timings to be complied with. The main steps are:

1. Draft a List of all communication activities foreseen
2. For each of them it's necessary to point out the steps required to be completed
3. Draft a Budget and define responsible persons for each step
4. Define timing for each activity and activity steps.

The implementation phase includes the possibility to update and also upgrade the Plan and the activities, if necessary, with the co-ordination of the **Dissemination Board** and the **Steering Group**. Furthermore, a realistic evaluation of the Plan and of each activity is therefore specified in the Plan and realized.

B.3 COMMUNICATION OBJECTIVES

HYMANTOVALLEY, within the development of the Hydrogen Valley of the Province of Mantova, perfectly in line with the EU Green Deal, the Fit for 55 Package, the REpowerEU plan and the EU Hydrogen strategy, as well as with the priorities of Mission Innovation and Clean Hydrogen, the project intends to demonstrate how all the different parts of a cross-regional renewable hydrogen value chain will fit together in an integrated system approach. Within this framework, the project has been conceived as a test-bed, focusing on an initial production, distribution and consumption of the produced renewable (green) hydrogen.

The project outcomes should have a tremendous environmental (Climate Mitigation) and socio-economic impact at a local, National and global level. An effective communication of the project results and impacts become relevant for reaching the main stakeholders and the wide public. Additionally, it is relevant to show also the commitment of the project Partners to provide a sound contribution to the EU Policies promoted particularly in the last 10 years.

In terms of contribution to the aims of the Union Policies and Strategies on climate change mitigation HYMANTOVALLEY:

- Contributes to the shift towards a low-carbon and climate-resilient economy and to the protection and improvement of the quality of the environment in the EU and worldwide.

- Contributes to the development and demonstration of innovative climate change mitigation and adaptation technologies, systems, methods and instruments suitable for being replicated, transferred or mainstreamed.
- Promotes green infrastructure and sustainable approaches at a local level through the development and implementation of Green Procurement actions.
- Contribute to the implementation, updating and development of European Union environmental policy and legislation, thereby contributing to sustainable development and low-carbon society ("A Roadmap for moving to a competitive low carbon economy in 2050" - the "Roadmap 2050" and the European Green Deal) leading to cut greenhouse gas emissions by at least 55% by 2030 (from 1990 levels) to becoming climate neutral by 2050 (Parliament Resolution 2020).

A specific contribution will be granted to the:

- Europe 2030 Energy Framework on GHG emission reduction target of at least 55%, increase of 27% for renewable energy and energy saving by 2030, compared to 1990 values.
- European Parliament resolution of 15 January 2020 on the European Green Deal, with the aim to reach the objective of making the EU climate-neutral by 2050, in line with the Paris Agreement.
- United Nations Framework Convention on Climate Change (UNFCCC), in particular on stopping the growth in GHG emissions by 2020 with a reduction of 60% by 2050 compared with 2010.

All the Partners, coordinated by AGIRE, will disseminate properly the project activities, results and impacts (environmental and socio-economic) with specific attention to the technical solutions proposed at a National and EU scales. Relevant stakeholders will be actively involved, in particular industry, academia, associations, public Authorities and the wider audience.

B.4 PROJECT MESSAGES

Once the target audience is defined, key messages will be identified. These depended on the nature of the target audience. If the objective is to promote an environmental innovation to business companies, the communication activity will identify competitive factors such as how those companies can become more efficient or competitive by introducing the innovative hydrogen technology proposed by the project.

There is a range of messages addressed to different audiences, with content and layout tailored to each group, to:

- Show the importance and relevance of the issue (technical innovation, reasonable cost, etc.).
- Link messages to specific audience values, beliefs or interests.

- Understand what motivated the audience and connected the messages to this.
- Be culturally relevant and sensitive.
- Make messages clear and memorable with a few key words.

Particular attention will be granted to:

- Be clear on communication priorities. Limited budgets and time mean it is better to focus on activities producing measurable results. If the project has technical relevance, it is better to focus on the main specialised press and magazines, rather than spending time and energy trying to achieve a mention in national mass media.
- Make a suitable Communication Planning for strengthening relevant contacts with journalists of specialised press and magazines, publishers, links with events or outside organisations or existing Network or new ones to be used to boost project outcomes and results because they can be considered realistic, effective and economically relevant.
- See the communication obligations set out by the I3 programme not just tasks to be completed, but playing a role in the overall communication strategy. For example, a comprehensive Project Handbook can be given out at relevant events, or sent to decision-makers so they can see what significant impact the project might have at a local level.
- Make realistic Communication, without overestimating nor depreciating goals, outcomes, results and achievements.
- To profit and benefit of Communication platforms and Networks provided by EU Programmes and Institutions (Websites, Newsletters, Events), because they represent mainly a big opportunity to spread widely project results to relevant target audiences.

B.5 TARGET AUDIENCES

HYMANTOVALLEY aims at demonstrating the de-carbonization of a quite air-polluted area in Europe laying in the Italian Padany Plain (Pianura Padana) by building a replicable green hydrogen ecosystem implemented as an integrated model of hydrogen production, storage, transportation and utilisation for heat, power and mobility. Including the development and use of hydrogen-fed and zero emissions ships, trains, buses and buildings.

The project partners consider a key point to give the widest possible visibility to the project and to raise the awareness of the relevant stakeholders on important environmental issues and technology innovation on hydrogen system. Dissemination activities were specifically targeted to the main stakeholders according to their own sectors. Privileged targets included the public sector and policy makers, the wide public, industry and academia, technical experts, international investors and financial institutions.

The dissemination campaign will last for the whole duration of the project and longer. Moreover, project stakeholders will be strongly involved in the project Actions. In particular:

- Project outcomes will be disseminated mainly towards the project stakeholders through the realization of or participation in national and international events and networking or Cross-Dissemination activities with other EU funded projects Consortia, in order to receive feedbacks and possibly to establish fruitful collaborations during the project time and for future proposals.
- Selected representative stakeholders will also be involved during the validation process in order to obtain relevant feedbacks on costs efficiency and sustainability in a real-world scenario. This aspect is considered to be extremely relevant for fine tuning the HYMANTOVALLEY solutions, according to special technical and regulatory needs of their related market sectors, for the assessment of project's results (technical and engineering point of view) and of the socio-economic and environmental impacts.
- Interviews and questionnaires might be conducted, if needed, with the wider public for fine-tuning the socio-economic impact of the project (if hydrogen utilization is accepted), particularly in the Mantova province.

Public Authorities (PAs)

The project aims at strongly involve EU public Authorities in order to stimulate them on relevant topics related to hydrogen, sustainability and climate change. Public Authorities will provide relevant feedbacks on the impact and validation of the project outcomes at socio-economic level, for example, including extensive monitoring of hydrogen systems safety, air quality, public transports de-carbonization, inland navigation, intermodal transports for goods. Through the organization of and the participation in workshops and project events at the Covenant of Mayors Initiative, Fedarene, ICLEI, etc., relevant International Municipalities and Regional Authorities will be informed on HYMANTOVALLEY achievements. Additionally, the following activities will be undertaken:

- A public website in English / Italian languages will be realized and groups on social networks will be opened.
- Project News and Newsletters will be sent to a wide number of subjects (about 400 at local, national and international level) and will be posted on the project website, while links to the project website will be sent to other similar initiatives.
- Links to the project website will be positioned on the website of the Partners involved in the project for sharing communication initiatives, widening the impact.
- A communication campaign through local, national and international press will be realized.
- Articles on relevant and specialized magazines will be published.
- A Project Handbook, summarizing all project's features and results to be achieved, in particular by the technical, environmental and health points of view, has been already published at the very beginning of the project. HyMantoValley expects a considerable socio-economic and environmental impact because

it aims to achieve important results to boost growth and wellness primarily in the Mantova ecosystem and possible replication experiences in participating regions and in the S3 community.

Policy Makers

Policy makers are responsible for the local, national and common EU policies, regulations and medium-to-long term strategies. For such a reason it is important to make them aware of the importance of emerging threats as well as new sustainable technical solutions able to mitigate substantially GHG emissions. Policy makers, also thanks to the pressure coming from the wide public consciousness on climate change and environmental problems, are able to update strategies and policies with more pressing, convincing and well targeted actions. Among policy makers, the project Consortium targeted the EU Environment DG, international University and Research, Ministry at international level. Nevertheless, also ANCI (National Association of Italian Municipalities), Regions, Provinces and Cities will be involved in the HYMANTOVALLEY networking actions. In particular the following activities will be foreseen:

- Invitation to the project events.
- Newsletters diffusion.
- Networking events with Regions, Provinces and Municipalities.
- Articles on policy and regulation at a national and EU level.
- Reports LCA and S-LCA (Social Life Cycle Assessment) will analyse the potential social impact of the project development on the territory. Moreover, the Consortium will provide policy makers with valuable information and proposals on possible updating of local policies, towards higher level of sustainability, lower GHG emissions, de-carbonization of hard-to-abate industrial sectors, resilience to climate change coming from the adoption of innovative hydrogen exploitation solutions.

Wide Public

EU citizens are gradually becoming aware of the environmental problems caused by the dependence from fossil fuels, massive energy consumptions, resources overuse, GHG emissions and the harmful effects of bad air quality, traffic and noise: this not only in the EU, but globally. Citizens are probably one of the most relevant audiences for EU projects, directly related to the adoption of new EU policies and suffering the environmental and socio-economic impacts. Moreover, wide public provides important feedback on the market needs, driving public Institutions and industry to be more effective providing more environmentally efficient solutions. The following activities will be undertaken towards the wide public:

- A project website in English / Italian languages will be realized, while groups on social networks will also be created. We expect at least 5.000 people visiting HYMANTOVALLEY website pages in the next 3 years, since the starting up of the project.
- 20 (downloadable) project Documents will be published on the project website.

- News and newsletters can be sent to a wide number of subjects and will be conveniently posted and uploaded on the project website, while links to HyMantoValley website will be asked to communities or associations, other projects and relevant stakeholders.
- Links to the project website were positioned on the website of the Partners involved in (and endorsing) the project and they were asked also to share aims and results with their own stakeholders and with the wide public, if possible.
- A communication campaign through national and international press, with articles on consumers magazines will be realized.
- A Project Handbook, summarizing all project's features and results achieved, in particular by the environmental and health points of view, was already published at the end of 2024.
- HYMANTOVALLEY project will participate in some Fair and Exhibitions (around 5) opened to citizens. In many cases flyers will be left in stands of friend exhibitors at relevant fairs.
- 5.000 brochures and flyers (or more) will be realized and diffused during public events.
- Promotion and publicizing of the climate mitigation and eco-sustainability relevance of the innovative solutions on hydrogen utilization, developed by HyMantoValley, will be published on consumers friendly media during and after the conclusion of the project. We expect to reach 100.000 peoples

Industry

Industry is fundamental for the EU leadership and competitiveness at a global level. The partners recognise that a healthy competitiveness, together with a raise of awareness in policy makers and public opinion globally, will further push EU companies to conduct R&D activities on more and more low-carbon and climate resilience solutions, especially in the urban context and according to the EU Adaptation strategy.

The following actions will be conducted during the project:

- Realisation of a dedicated space (Technology) on the project website.
- Brochures and flyers especially dedicated to industry sectors showing the environmental and climate advantages of the HYMANTOVALLEY solutions.
- Dedicated events and conferences, to show aims and results of the project to raise awareness on the potential benefits for the industry sector.
- Technical articles and papers on magazines.
- Presentation of project's results at International Conferences and Workshops with the participation of Entrepreneurs Associations, companies, experts, other EU projects Consortia, etc.

Through the organization of workshops and project events, more than 200 stakeholders from the industry sector will be invited within the project duration. The target audience from the industrial sectors will be underlined per segment, with a particular attention to the hard-to-abate (HTA) sectors, using fossil fuels as an energy source,

currently the most polluting and difficult to convert (cement, paper mills, ceramics, glass industries, etc.), with the aim to propose research and development and investment projects for the decarbonisation of industrial processes, trying to achieve the carbon neutrality, mainly through the use of low carbon emission hydrogen:

The role of Entrepreneurs Associations is prominent and fundamental, because they represent companies covering a relevant part of the national and international market.

Academia and Technical Experts

Academia is pivotal for research on one side because it often brings to important innovations in technology and science, on the other hand through technology transfer activities. For such reasons the partners aimed at targeting key Universities and Research Centres related to the hydrogen sector. The following activities will be principally foreseen:

- Publishing articles on peer-reviewed journals. A large number of researchers and technical experts from the academy world will be reached.
- Participation in international events in the hydrogen sector, (e.g.: associations annual meetings), presenting HYMANTOVALLEY project.
- Networking activities. Technical Experts will be involved as key stakeholders through the participation in Conferences and Workshops organized by the Consortium, but also through small Meetings, and in other high-level events organized by the EU Institutions, like EUSEW or Green Week in Brussels.

Academia and Technical Experts will provide as well relevant feedback on scientific aspects and offered chances for future collaborations on innovative hydrogen production, distribution and utilization technologies and solutions, smart cities approach, including data management, etc. More than 100 experts will be reached.

In Italy many Universities, more specifically some specialized Departments, are very active in hydrogen research, so some of them will be in networking and dissemination activities.

International Investors and Financial Institutions

Investors and Financial Institutions are playing a key role in financing both energy requalification and technology update projects within the EU Municipalities. Their double role to finance directly public Institutions or, much more, indirectly through the ESCOs, is becoming absolutely necessary for public investments. For this reason, it is essential to involve Investors and Financial Institutions allowing them to be aware of the innovative systems that can be provided by the HYMANTOVALLEY project through the development of the Mantova hydrogen Valley and the whole hydrogen value chain. Large companies can more easily finance their R&D activities whether using internal resources, getting loans from banks, issuing bonds, or raising equity finance in the stock markets. Public Institutions have limited capability and their funding options for investments in innovation are

much more limited. Investors and Financial Institutions will be were involved through Networking activities, Events and small Meetings:

- Specific bilateral or multilateral Meetings.
- Participation in project Conferences, Workshops or other high-level Events at a National or International level, organized by the Consortium, as speakers or simply participant stakeholders.

International Associations

The partners will invite various high level Associations involved generally in environmental sustainability or specifically in the hydrogen sector for technical reasons, during the dissemination and validation activities, but also will profit of their key role in National or International Institutions, asking them to collaborate in the organization of project Events during, for example, Fairs and Exhibitions where HyMantoValley will participate or International Events like the annual Energy Week or Green Week, organized in Brussels by the EU Commission, or other Associations annual Events. In particular the following Associations will be contacted asking for support:

1. **Fedarene**. EU Energy Agencies & Regions Network in Brussels.
2. **Energy Cities**. A community of over 1000 local governments from 30 countries. The network gathers frontrunners and energy transition beginners, city officials and technical experts.
3. **Covenant of Mayors**. The world's largest movement for local climate and energy actions, opened to all local authorities aimed to commit themselves to adopting an integrated approach to climate change mitigation and adaptation.
4. **Renael**. The Italian National Network of Local Energy Agencies, based in Modena.
5. **European Clean Hydrogen Alliance**. Promoted by the EU Commission, it supports the large-scale deployment of clean hydrogen technologies by 2030. It brings together renewable and low-carbon hydrogen production, demand in industry, mobility and other sectors, and hydrogen transmission and distribution. Its members come from industry, public authorities, civil society, and other stakeholders.
6. **Hydrogen Europe Research**. With 150 members, covering a wide range of competencies and infrastructures, it actively promotes scientific excellence, intellectual property development, and technology transfer in Europe in the hydrogen sector.
7. **Hydrogen Europe**. It is the European association representing the interest of the hydrogen industry and its stakeholders and promoting hydrogen as an enabler of a zero-emission society. The aim is to bring together diverse players, large enterprises and small and medium-sized enterprises, national hydrogen associations, non-governmental organisations, regional public authorities and other relevant organisations which support the delivery of clean hydrogen and fuel cells technologies. But also to

promote national, European and international policies and initiatives that strengthen market penetration of European hydrogen technologies domestically and globally.

8. **European Partnership for Hydrogen Technologies.** It is a public private partnership supporting research and innovation (R&I) activities in hydrogen technologies in Europe.
9. **Mission Innovation 2.0.** Launched in 2021, it is catalysing a decade of action and investment in research, development and demonstration to make clean energy affordable, attractive and accessible for all, towards the Paris Agreement goals and pathways to net zero. Within the Alliance, the **Clean Hydrogen Mission** has the mission to increase the cost-competitiveness of clean hydrogen by reducing end-to-end costs to a tipping point of 2 USD/kg by 2030.
10. **The Community Hydrogen Forum (CH2F).** It is a platform designed to help everyone to understand the opportunities that hydrogen technologies offer, especially in Northwest Europe. The platform is intended to be a forum for national, regional, and local Governments, energy agencies, community development groups, energy cooperatives, educational institutions, transport sectors, etc.

Publishers

Finally, it may be useful to remember that also publishers can play an interesting role in the diffusion and dissemination of activities and results of the HYMANTOVALLEY project. Canale Energia, Quotidiano Energia, Wired.it, Elettrico Magazine, Mondo Idrogeno 360° Online, Pianeta Idrogeno (edited by ENEA Research Centre), PV Magazine, The Hydrogen Europe Quarterly, Global Hydrogen Review, Energy, hydrogen technology international and other specialized Italian and international Magazines, will be asked to publish articles on HyMantoValley project. At international level, some EU Commission Magazines and websites might deal with our project in some occasions and might publish the HyMantoValley story or an Event organized, supplying a wide visibility to the project.

B.6 IMPLEMENTATION OF THE COMMUNICATION STRATEGY

The following activities have been foreseen to be implemented for communicating and disseminating the HYMANTOVALLEY project aims and results. In February 2025, due to major problems that are leading to a possible request for Suspension of the project for 6 months, a readjustment and reorganization of the activities have been evaluated, particularly to postpone some of the activities already foreseen or to change some others become definitively useless:

- | | | |
|----------------------------------------------------------------------|----------|-------------|
| 1. (Draft) Communication, Dissemination and Exploitation Plan | Deadline | May 2024 |
| 2. Final Communication and Dissemination Plan | Deadline | August 2026 |

The specific Plan defining all the communication, dissemination and exploitation activities, budget, deadlines and Risk management, to be regularly updated.

- | | | | |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|
| 3. | Final Exploitation Plan with Market Readiness Assessment | Deadline | August 2026 |
| 4. | Project logo and Visual Identity
Main logo + Newsletter layout, Social Pages layout | Deadline | October 2024 |
| 5. | Web Portal Layout, structure and design | Deadline | October 2024 |
| 6. | Web Portal Opening | Deadline | October 2024 |
| 7. | Web Portal contents continuous updating
5.000 Visitors / 20 downloadable Documents | Starting from | October 2024 |
| 8. | Social Media Groups and Chats Opening
Opening of project Social Media Groups and Chats
as: Linkedin, Facebook, Instagram, Slideshare, YouTube, etc. | Deadline | June 2024 |
| 9. | Social Media Groups and Chats continuous updating | Starting from | June 2024 |
| 10. | Mailing List
Selection of at least 400 relevant stakeholders at a local, National and International level (Policy makers, Associations, Companies, potential customers, etc.) to be used for communication and dissemination activities | Starting from | October 2024 |
| 11. | Press Conference / Press release 1
First Project Press Conference / Press Release | Deadline | October 2024 |
| 12. | Brochure / Leaflet / Flyer layout design and Printing
1.000 copies. | Deadline | February 2024 |
| 13. | Brochure / Leaflet / Flyer layout design and Printing
2.000 copies. | Deadline | August 2026 |
| 14. | Brochure / Leaflet / Flyer layout design and Printing
2.000 copies. | Deadline | August 2026 |
| 15. | Informative Boards / Roll up Banners
Layout and printing (1 unit x project activities) | Deadline | February 2024 |
| 16. | Informative Boards / Roll up Banners
Layout and printing (1 unit x project activities) | Deadline | December 2025 |
| 17. | Press Conference / Press release 2
Second Project Press Conference / Press Release for
Conference and/or Workshop | Deadline | December 2025 |

18. Press Conference / Press release 3 Third Project Press Conference / Press Release for Conference and/or Workshop	Deadline	August 2026
19. Newsletter (2 newsletters / year) - Total number: 6	Deadline	August 2026
20. Posters - Total number: 20	Deadline	August 2026
21. Press Articles - Publication and diffusion of 10 Articles	Deadline	August 2026
22. Videos (short Version)	Deadline	February 2024
23. Videos (long Version)	Deadline	June 2026

Particular conditions or additional descriptions were placed for some activities or actions for being more effective in their development:

- A devoted Web Portal, under the already existing AGIRE Website, was created towards the end of 2024, in English and Italian languages. It will be updated continuously and maintained active for at least 3 years after the end of the project. It contains several sections and operational functions:
 - a. Description of the project objectives, the main activities and the results obtained.
 - b. Partners profiles.
 - c. Events organized and stakeholders involved.
 - d. Newsletters, leaflets, brochures and other publications (about 20 in total).
 - e. Links to other relevant sites.
 - f. Counters for statistical data monitoring (number of registrations, downloads, visitors, pages loaded, etc.).

The link of the Hymantovalley website is <https://hymantovalley.agirenet.it/en/>

- A particular relevance will be granted the project LinkedIn page, due to the huge diffusion of this social network. The impact of LinkedIn has massively increased in recent years, it is now the first calling point for many professionals who wish connect their activities with peers and influencers in their sector, and for joining in different discussion groups.

The link to the Hymantovalley LinkedIn page is:

<https://www.linkedin.com/showcase/hymantovalley/about/?viewAsMember=true>

- All the Partners involved will contribute to a selected Mailing List of relevant Stakeholders at a local, National and International level (Policy Makers, Associations, Companies, potential Customers, etc.) to be used for all project communication and dissemination activities. At least 400 subjects will be involved at the end of the project.

- Brochures, Leaflet, Flyers. A total number of 5.000 pieces will be published. They will be diffused, particularly, during Fairs and Exhibitions (Covenant of Mayor Events, EnergyCities Annual Conferences, Energy Weeks and Green Week in Brussels, Fedarene Annual Events, Fair and Exhibitions, etc.
- Press / Web Articles + Videos. Many Press Articles will be published from the HyMantoValley Consortium on Newspapers, specialized Magazines or Websites. Additionally, the project story will be diffused on Fedarene Brochure (2024 and 2025) and website, on the ManagEnergy website, for a total of at least 10 active presences on relevant international brochures or websites. Finally, a 3-minute Video was produced at the beginning of 2024, while a longer final version, explaining the project and the results obtained will be published during the last 12 months of the project.

B.7 PROJECT BUDGET

The project effort foreseen for Communication, Dissemination, Networking and Exploitation activities was calculated in around 12% of the total staff costs, in terms of person / months, a sound indication of the relevance of these kind of activities in the EU projects, aimed at the effective communication and diffusion of the project results during and after the three-year action.

Staff costs, summarizing the budget foreseen for all Partners, have been calculated as follows:

- Dissemination, Communication & Exploitation Activities

person / months	89,50
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Total person / months	89,50
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The budget might necessarily be updated during the project advancement, since activities will be more properly re-addressed on the base of the feedbacks arising from the Partners and the I3 Programme managers and both project stakeholders and target groups.

C. Dissemination Plan for the HYMANTOVALLEY Project

C.1 DISSEMINATION STRATEGY

Communication COM (2011) 21 encourages EU companies to undergo continuous innovation and technology transfer processes and at the spreading out of knowledge towards the industrial sector, the research community

and the policy makers. HYMANTOVALLEY aims to propose the elaboration of sustainable solutions in the hydrogen sector for both production and utilization. Extensive and comprehensive activities are foreseen to demonstrate the generated impact of the project on the territory and the effective results: innovative solutions in the hydrogen distribution, know-how, new business models, policy recommendations, guidelines, networks, etc. The Partners will be fully committed in the spreading of the achievement and the impacts towards the industrial and academic community in order to obtain relevant feedbacks and potential opportunities for future collaborations. In the same time, it will be considered fundamental the awareness raise for public Authorities, policy makers and the wider public with reference to climate change mitigation in both Italy and the EU.

On the other hand, more particularly, the partners are considerably aware of both replicability and transferability relevance of the project outcomes, of generated knowledge and know-how. Specific barriers might hinder a widespread distribution of the HYMANTOVALLEY idea toward the realization of the Hydrogen Valley of the Province of Mantova and will be taken into consideration, even if there is an increasing acceptance that hydrogen will have a role to play in the Net Zero energy system to support a differentiated and flexible energy procurement:

- Municipalities, public Authorities and local communities can be reluctant to accept hydrogen production and utilization, because of safety and security concerns.
- Hydrogen production, storage and transportation still have high costs.
- The future demand for green hydrogen is not guaranteed. Despite many commitments and plans to build a hydrogen development path in many Countries, green hydrogen is still facing many obstacles and deadlocks.

A range of stakeholders, academia, industry, Government, network operators and regulators, will be required to develop collaborative solutions to reduce these and other barriers.

The HyMantoValley Partners, through validation activities, will work to demonstrate, to the widest possible audience that:

- Hydrogen and energy have a long-shared history.
- Hydrogen is light, storable, energy-dense, and produces no direct emissions of pollutants or greenhouse gases.
- Hydrogen can give a significant contribution to clean energy transitions, but it needs to be adopted in sectors where it is almost completely absent, such as transports, buildings, power generation and generally speaking in all those so called hard to abate sectors (HTA). HyMantoValley provides research and investments in the realization of these opportunities. The project dissemination activities targeted such aspects as well and Regions, EU level Organization and Entrepreneurs Associations are endorsing the project, while many subjects will be involved in the dissemination activities during and after the end of the project.

Concerning the project Target Groups for Communication, Dissemination and Networking activities, they are precisely described in paragraphs B.5, C.3 and C.4.

C.2 IMPLEMENTATION OF THE DISSEMINATION PLAN

The following activities were foreseen to be implemented for disseminating the HYMANTOVALLEY project aims and results. Some of the initial options (N.10) will be substituted with more suitable opportunities from commercial, marketing and relevance reasons, while some additional Events will be introduced:

24.	Engagement of at least 200 stakeholders / 100 Feedbacks through Conferences, Workshops, Webinar, Exhibitions, business groups on social networks, etc.	Deadline	August 2026
25.	Presentation of HMV Project to local Entrepreneurs (Mantova)	“	20 December 2023
	Event for presenting HyMantoValley to local Entrepreneurs	“	31 January 2024
26.	Confindustria Roadshow for the Hydrogen Valley (Volta Mantovana)		
	Event for presenting HyMantoValley to local Entrepreneurs	“	31 January 2024
27.	Confindustria Roadshow for the Hydrogen Valley (Quistello)		
	Event for presenting HyMantoValley to local Entrepreneurs	“	14 February 2024
28.	Confindustria Roadshow for the Hydrogen Valley (Viadana)		
	Event for presenting HyMantoValley to local Entrepreneurs	“	11 March 2024
29.	Participation in Connecting EU Days in Brussels	"	2-5 April 2024
30.	Participation in Night of Research Mantova	"	24 September 2024
31.	Organization of EFIP ExCo 2024 Seminar	"	10 October 2024
32.	Participation in Rotary-Lions Seminar in Castiglione d. Stiviere	"	12 October 2024
33.	Participation in KEY 2026 in Rimini The Energy Transition Expo	"	March 2026
34.	Participation in Covenant of Mayors Annual Event	"	August 2026
35.	Participation in EnergyCities Annual Conference	"	August 2026
36.	Participation in EUSEW Sustainable Energy Week in Brussels	"	August 2026
37.	Participation in the EU Green Week in Brussels	"	August 2026
38.	Participation EnergyCities Annual Conference	"	August 2026
39.	Participation in Fedarene Annual Event	"	August 2026
40.	Participation in the RENAEL Annual Assembly Workshop	"	August 2026
41.	Participation in the World Hydrogen & Renewables Italy	"	August 2026
42.	Participation in the Piacenza Hydrogen Expo	"	August 2026

43. Organization of the **Final Conference in Mantova** " June 2026

Particular conditions (timing, for example), or descriptions were placed for some dissemination activities or actions for being more effective in their development:

- Final Conference, foreseen to be organized in Mantova. The project results will be shown to a wide specialised public. Other EU projects representatives will also be invited with the aim to cover as much as sectors as possible in connection with hydrogen issue. Only the best projects, with the widest impact and replication potentialities will be selected for presentation. AGIRE and Province of Mantova, together with Sapio and other Partners, will be asked to present the project and the results obtained in field with the realization of the expected Pilot Tests. A specific session will be dedicated to showcase the results of the environmental impact analysis to increase the awareness around the main environmental aspects related to the technical innovations provided by the HYMANTOVALLEY project in the hydrogen (production, distribution and utilization) sector.
- Workshops, Conferences and Exhibitions organized. Wherever possible, partners set up an agenda, a participants list to be signed, presentations and press follow up for each event.

C.3 NETWORKING ACTIVITIES

Networking and cross-dissemination activities are foreseen both to have confrontation with other technical experts and to widen HyMantoValley publicization through events organized by other EU financed projects, particularly co-financed by the I3 Programme, but not only. The goal, on one hand, is to take advantage from key actors' expertise, on the other hand to profit of the widest audience, offered by these actors, for communication and dissemination activities related to the results obtained by the HYMANTOVALLEY project. The Partners will exploit synergies with relevant stakeholders trying actively to involve them into the project activities, providing and receiving relevant feedbacks regarding hydrogen innovative research and application, regulatory issues,

The Partners will ensure a continuous information flow with these actors and will involve other Consortia in cross-communication and information exchange activities like:

- Exchange public deliverables and main achievements through the dissemination campaign (e.g. Reports, Newsletters, Brochures, etc.).
- Invitation of speakers at project Events (Conferences, Workshops and Partners Meetings).
- Sharing projects logos and links on websites.
- Obtaining potential future joint activities offering reciprocal advantages.

- Interviews with the project coordinators in order to collect relevant feedbacks.
- Establishment of links and collaboration finalized to propose new EU funded projects.

In particular, the following EU funded projects were targeted for common activities:

- **Hy2Market.** Creating the hydrogen market for Europe. 10 regions, 38 participants, the project investigates and develops a more mature hydrogen value chain across Europe on all market levels. The ultimate desire is to make Europe a resource-efficient and competitive green hydrogen economy. Hy2Market will step forward by creating interregional and international value chains by connecting regions in order to work on different innovations to boost the production, transport, and use of green hydrogen.
- **H2Value.** Supporting Regional Development of the Green Hydrogen Fuel Value Chain for Transportation in Estonia and Latvia. Co-financed by the I3 Programme, H2Value will establish the first interregional green hydrogen value chain in South Estonia, Tartu region, and Northern Latvia (Vidzeme region). It will set up a small-scale green hydrogen production plant based on solar energy; establish a green hydrogen refuelling station and test the transportation of green hydrogen via road; use hydrogen as a zero-emissions source of fuel for transport.
- **Escalate.** A Horizon Europe co-financed project, in line with the European 2050 goals, it aims to demonstrate high-efficiency zHDV powertrains for long-haul applications that will provide a range of 800 km without refuelling / recharging and covering at least 500 km average daily operation (6+ months) in real conditions.

As finalised in the part D of this Plan, some Indicators of progress were foreseen for the Networking activities:

- Establishment of links or collaboration with other EU funded projects.
- Deliverables exchanged among HYMANTOVALLEY and other EU funded projects Consortia.
- Delivery of Newsletters and Brochures to other projects Consortia representatives.
- EU funded project staff attending HYMANTOVALLEY events and vice versa.

No Deliverable nor Milestones were foreseen in the project proposal, but all Networking activities, contacts, strategies and means of communication will be reported among HyMantoValley activities.

C.4 TRANSNATIONAL ACTIVITIES

Many Networking activities, some are mentioned above, will be realized with international subjects. As already described these subjects, coherently with their role and activities they can have within the project, will be actively involved in networking events and meetings: indeed, to maximise the potential benefits and impacts of the

HYMANTOVALLEY project and to be positively influenced by other challenging ideas and proposals from other relevant EU projects, different subjects will be contacted and involved in our main activities.

Some EU Municipalities and Regions, or other subjects, will be highly interested in the project development and are expected to be involved by the end of the project and over. Even some EU Associations, as mentioned above, have already been or will be actively involved in the validation and dissemination activities.

Additionally, a series of relevant subjects will be involved in the networking and dissemination activities (workshops, conferences, annual exhibitions, etc.) specifically at international level because of their commitment on hydrogen or energy saving issues and for the capacity they have to reach a huge number of members (Fedarene, Covenant of Mayors, Energy Cities, etc.). The transnational aspects and impacts of the project are a key point for an easier and faster replication all around Europe of the hydrogen innovative technology foreseen in the project and in the development of the whole Hydrogen Valley.

As mentioned before, some of the subjects that will be involved are the following (thanks to Fedarene for the support):

FEDARENE

www.fedarene.org

European Federation of Agencies and Regions for Energy and the Environment. Brussels.

The premier European Network of regional and local organisations which implement, co-ordinate and facilitate sustainable energy and environment policies. Regional and local agencies, ministries and departments working in these fields are represented. Fedarene was involved to support the project particularly in networking activities (events, round-tables, etc.) with the Covenant of Mayors, ManagEnergy and other Institutions or Associations based in Brussels.

EISMEA

<https://eismea.ec.europa.eu>

The European Innovation Council and SMEs Executive Agency is responsible for developing and implementing the European Innovation Council and manages other EU programmes in the fields of SME support, innovation ecosystems, single market, consumer policy and interregional innovation investments.

Covenant of Mayors

www.covenantofmayors.eu

The Covenant of Mayors is the mainstream European movement involving local and regional Authorities, voluntarily committing to increasing energy efficiency and use of renewable energy sources on their territories. By their commitment to implementing EU climate and energy objectives, Covenant signatories aim to meet Paris

Agreement and 2030 Sustainability Agenda and the European Green Deal. It will be possible to organize events for presenting HyMantoValley project during an annual event.

Energy Cities – European association of local authorities in energy transition

www.energy-cities.eu

Energy Cities, the European Association of local authorities, created in 1990, represents more than 1,000 towns and cities in 30 countries. It was concretely possible to present HyMantoValley project during one of the Annual Conference organized, every year in a different European City, and to find members Institutions interested in the project activities and innovative technologies proposed.

ManagEnergy

www.managenergy.net

ManagEnergy is a technical support initiative of the old Intelligent Energy Europe (IEE) Programme of the European Commission which aims to assist actors from public sector and their advisers working on energy efficiency and renewable energy at local and regional level. By June 2017 it is managed by a Consortium. Fedarene is part of the Consortium. It will be possible to organize a meeting to present the project and to be publicized on their website.

Renaël – Italian Network of Regional Energy Agencies

www.renael.net

Renaël, the Italian Network of Regional Energy Agencies, is a strategic instrument created to promote synergy and subsidiarity among local energy agencies both on local and national scale considering Italy as an organic energetic system. It will concretely be possible to present HyMantoValley project during annual events organized in Rome or other main Cities, finding Energy Agencies members interested in the project activities or in the replication of Mantova Hydrogen Valley.

Smart Cities and Communities

www.eu-smartcities.eu

Smart Cities and Communities is a platform initiated by the European Commission with the dual aim of identifying and spreading relevant information on technology solutions and needs required by practitioners and providing information for policy support to the High-Level Group and the European Commission. It will be contacted to present the project activities and to be introduced on the platform.

D. Exploitation Plan for the HYMANTOVALLEY Project

Working on EU-funded projects can bring one or more partners to ensure that the knowledge generated within the research or the development of the actions are properly diffused. The structured actions to be taken, in order to make sure that this knowledge is delivered to the society, is considered within the Exploitation Plan.

The exploitation of research and pilot results can be supported by the dissemination of knowledge and information to a wider audience, including policymakers, scientists, and the general public. Commercial exploitation is one of the more direct ways to deliver research results to other companies or to the citizens. By translating research findings into tangible outcomes, researchers and their partners can accelerate innovation and drive progress in various fields.

HyMantoValley will produce a pilot of hydrogen tank to be used on board of a tugboat, but it can be used, as well, with particular and proper modification, on board of other vessels, even touristic boats, properly adapted. After the end of the project, Sapio might be able to continue the research for the development of an adaptive tank to supply boats of various types. Contacts have already been activated with shipping companies dealing with inland navigation.

A second direction of the Exploitation Plan, starting from the project outcomes, will be the search of new end users, to be managed after the end of the project because of the huge green hydrogen production (1.500 tons/year) arising from the Mantova Hydrogen Valley: logistics and transports sector (private and public), local companies in the hard-to-abate sector (HTA), district heating, are the main segments identified as most likely hydrogen users in the near future.

On the other hand, local policy makers and public Authorities, but also industrial Associations and local Communities, will be interested in the transfer of knowledge on regulation issues and roadmaps: how hydrogen production and distribution will be regulated? How the sector will be financed or cofinanced at a national or international level? This is a sector of interest for some members of HyMantoValley Consortium and will be fairly analysed.

However, the plan should be as **precise** as possible. During the project, it will be updated and detailed properly.

- In what area do we expect to have an impact?
- What needs might be solved thanks to the results of HyMantoValley project?
- Do they tackle a problem or respond to an existing demand?
- Who are the potential users of the project results and what outputs will be created? Will they be used?
- Where will the outputs be made available during and after the project?
- How might potential users be involved?

These are the questions we will answer during the project life to develop a suitable Exploitation Plan for the early years after the end of the project.

E. Evaluation of the Communication Strategy, Indicators and Risk Management

The evaluation task is entrusted to the Dissemination Board, composed by the Project Manager, the Communication Manager and the WP7 Leader. Periodical Meetings have been ensuring a correct evaluation and the updating of both the Communication Strategy and the Dissemination Plan.

The monitoring of the project through qualitative and quantitative Progress Indicators will allow the control of activities, actions and results implemented by the project.

Three Reports (First, Mid-term and Final) will answer for the realization of the project goals and of the quality of the results. The Consortium expected to complete 90% of the project targets 6 months before the end of the project. In case of particular risks, Reports might be adapted by the Steering Board.

Progress Indicators have been foreseen to check that project Deliverables and Milestones on Communication, Dissemination and Networking activities will be correctly produced, as foreseen in Part B and C and here briefly summarized:

Communication & Dissemination activities:

- Stakeholders and Authorities participating and showing interest in the project events at a local, National or International level (meetings, conferences, workshops, seminars, fair and Exhibitions, etc.).
- Participation in EU relevant Associations annual Events.
- Web Portal: Visitors and downloadable documents.
- Media coverage of project events: press conferences and/or press releases, and/or press articles for each HyMantoValley public event.
- Preparation and handling of brochures, leaflet, flyers, etc.
- Videos of the project results.

Networking activities

- Establishment of links or collaboration with other EU funded projects.
- Deliverables exchanged among HYMANTOVALLEY and other EU-funded project Consortia.
- Delivery of Newsletters and Brochures to other projects Consortia representatives.
- EU funded project staff attending HYMANTOVALLEY events and vice versa.

To avoid possible risks and problems a Contingency Plan was foreseen, providing some actions in case of failure of one or more Communication, Dissemination and Networking activities:

Potential difficulties: stakeholders not interested in project's results and events.

Risk: low.

Contingency Plan: the partners will adapt the communication tools in order to make it more effective. More interesting and frequent Newsletters. Organization of additional very specialized events locally.

Potential difficulties: dissemination campaign not effective.

Risk: low.

Contingency plan: dissemination campaign carefully planned at the beginning of the project and well updated during the project lifetime. Redesign of the project website layout. More interesting and frequent Newsletters.

Potential difficulties: delays and inaccuracy in the elaboration of the Exploitation Plan.

Risk: low.

Contingency plan: careful planning and elaboration of the Report, Meetings with interested Partners and with the project Management and Technical staff.

Potential difficulties: other project Consortia are not willing to exchange knowledge or are not available to participate in HYMANTOVALLEY events.

Risk: low.

Contingency plan: revision of the communication and Networking strategy, playing more attention to the networking activities to actively involve other Consortia in the dissemination campaign.

Potential difficulties: suspension of the project for 6/12 months.

Risk: medium.

Contingency plan: redistribution of the activities with longer deadlines.

Potential difficulties: changes of the Partnership: admission of new Partners.

Risk: low.

Contingency plan: redistribution of the activities including the new Partners.

F. After Project Life Communication Plan

The idea to produce a sort of "After Project Life Communication Plan" is connected with the aim of the Partners to continue communication and dissemination activities, initiated during the project life, in the years that follow the end of the project, ensuring a mid to long term management of activities. It will give details regarding what

actions will be carried out, when, by whom, and using what sources of finance. Therefore, messages and the related methods of transmission have been already targeted and clearly defined for each stakeholder category. The Partners are fully convinced of the concrete advantages that HYMANTOVALLEY solution is bringing in terms of sustainable advancements against climate change and they will try to find all necessary measures to ensure continuation and development beyond the project lifetime. HYMANTOVALLEY project can have a great impact on public Authorities choices to adopt actions towards more sustainable solutions in the framework of the climate mitigation strategies at 2030 and 2050. Moreover, the project will provide relevant feedback and valuable information to EU data systems. The demonstration of technology potentialities, the replicability and transferability of the Hydrogen Valley at large scale in other Countries, are the objective of HYMANTOVALLEY Consortium for the next years.

A detailed plan with initiatives will thus be prepared, not dependent by the Final Report. It will take advantage of the results of the actions on dissemination and networking activities, on the development of other projects in which some Partners can be involved (e.g.: Manthova, PNRR or Mantova Hydrogen Valley).

Each partner and supporter will identify relevant initiatives. Particularly the Plan will be based on the following commitments:

- The project web site has to be maintained for 3 years after the project. The coordinators (Province of Mantova and AGIRE Energy Agency) will be available to answer to any request of information by phone or e-mail and all relevant (public) documents will be at disposal of the wide public on the website, free of charge:
 1. Published material.
 2. Copies of the Newsletter forwarded to the stakeholders (on a 6-month basis).
 3. Hydrogen regulation (national and European), which will be constantly monitored and updated.
 4. Links to relevant institutional and technical websites.
 5. Educational material for students related to hydrogen issues.
- Social networks devoted groups will be updated and monitored by the coordinators.
- The Consortium will continue the dissemination of the project results to the widest possible audience. In particular it will be ensured the participation of the partners staff in international events (Fairs, Exhibitions and Conferences, Seminars and Workshops) to presents the project outcomes and updates. Publications on technical journals or magazines will be also provided. The aim is to reach the largest number of stakeholders as possible.
- Particularly relevant for the Partners is to provide recommendations to policy makers at the end of the project and further with the aim of providing relevant insights on future GHG emissions reduction following the experience of the HYMANTOVALLEY and similar EU-funded projects.

- An additional effort will be applied providing public Authorities with Reports demonstrating the HyMantoValley technological and socio-economic benefits.
- A monitoring and search of additional investments will be granted, including regional, national and EU financial instruments, from public or private investors and commercialisation pathways (signature of agreements, internationalisation activities, etc.).

The After Project Life Communication Plan will be drafted consistently before the end of the project, in August 2026, so to benefit by actions and activities already developed during the project lifetime.

The Partners will collaborate in the definition of the actions to be implemented and of the progress indicators to be collected.

Document Control Information

PROJECT	
Document Title	Communication Strategy, Dissemination and Exploitation Plan
Project name	Hydrogen Valley in the Province of Mantova
Project Acronym	HYMANTOVALLEY
Project number:	1011115147
Document Author	Galli Nicola, Musci Massimiliano
Project Owner	HyMantoValley Consortium
Sensitivity	Public
Date:	23 May 2024

Document Approver(s) and Reviewer(s):

NOTE: All Approvers are required. Records of each approver must be maintained. All Reviewers in the list are considered required unless explicitly listed as Optional.

Name	Role and Partner	Action	Date
Roberto Grassi	Project Manager, Province of Mantova (Coordinator)	Approval	23/05/2024
Nicola Galli	Director of AGIRE, Communication lead Partner for Communication	Approval	31/03/2025

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HISTORY OF CHANGES		
Version	Publication Date	Change
1.1	23/ May 2024	Initial version
1.2	27 May 2024	Second version
1.3	31 May 2024	First uploaded official version
2.0	23/01/2025	First revision after request by the Project Adviser
3.0	18/02/2025	Further revision after 3rd partner meeting
4.0	31 March 2025	4th version completed after indication of the Hymantovalley Project Adviser Second uploaded official version