



HY STORE

Hybrid Services from Advanced
Thermal Energy Storage Systems

D8.1-Baseline Communication Package

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1. Executive Summary

Deliverable 8.1 (D8.1) is the basic communication package of the HYSTORE project, in which the public communication materials, corporate identity and website are described. The communication materials included are the following: the project presentation, poster, brochure, social media, the logo and the website.

The communication materials themselves are attached, while this document describes them in detail, with screenshots.

2. Introduction

This document presents both the physical and virtual elements that will be used as part of HYSTORE communication and dissemination campaign to promote the project. Through various communication outlets the consortium intends to promote the objectives, processes and results of the HYSTORE and present it to selected stakeholders and suppliers, such as the scientific community, technical experts, strategic experts and policy makers, stakeholders, the general public and end-users.

Our overall stakeholder engagement strategy will be described in deliverable 8.3 (D8.3) HYSTORE Stakeholders Community here we only anticipate some planned communication goals (why), selected project messages (what), specific objectives, stakeholders (to whom), methodology and tools (how), timetable and work plan (when) and, finally, responsibilities (who).

The materials created and presented in this deliverable (D8.1) correspond to the first communication package to support these objectives, materially and visually, constituting the first step of the project communication, together with the creation of the corporate visual identity and the launch of the project website. This deliverable, together with the related communication materials, is part of Task 8.1 of WP8, whose main objective is the promotion and wide dissemination of the project, wanting also to support the rest of the work packages and the long-term objectives of HYSTORE.

In this document, the communication materials are presented together with their descriptions and screenshots.

The communication, promotion and dissemination materials will be regularly updated during the life cycle of the project and can be adapted at the request of the partners, according to specific needs.

3. Public communication materials

The entire public communication kit of the HYSTORE project includes the corporate identity, logo, and project website, as well as materials such as the project presentation, poster and brochure. The next communication materials, to be developed soon, will consist of a project status video and a press note.

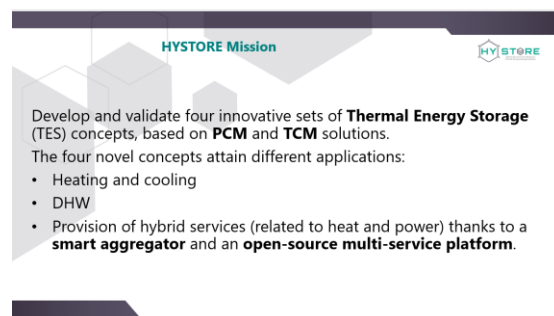
The materials included here represent a graphic and explanatory extension of the project, diversified into different types of documents according to function and target audience, which will help to disseminate the project through different channels, such as the web, social networks, public presentations, etc.

The enclosed communication package aims to provide partners, the public, stakeholders and journalists with different materials explaining and illustrating the following: the challenges faced by the project, the opportunities it seizes, the proposals it offers and, finally, the main concepts, objectives, methods, technologies and use cases around Europe.

3.1. Project Presentation

3.1.1 Power Point

A PowerPoint standard presentation has been created for the HYSTORE partners to be displayed when presenting the project at conferences, meetings, fairs and other events. The presentation is a baseline guide that provides key project information. It can be adapted or completed by each partner for specific needs or events.

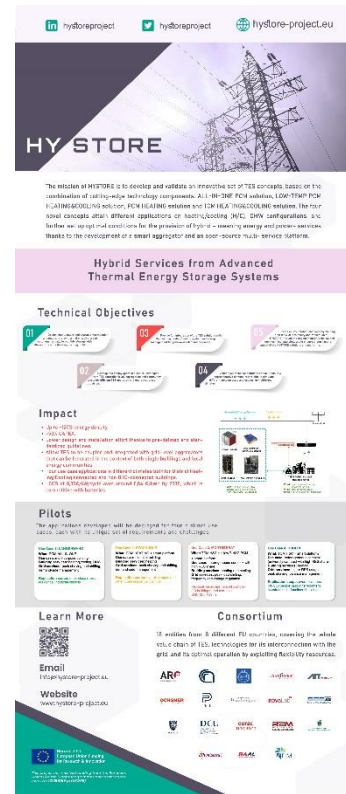


D8.1 Baseline Communication Package



3.1.2 Poster

A roll-up poster has been designed as an important tool for general project visibility during events, conferences, open days, and workshops. The poster has been designed with an informative, but also explanatory and pedagogical intention, so in addition to informing, it explains some technical aspects of the project. The roll-up includes key project information as title, main concepts, consortium partners, link to the project website, social networks, technologies used and project pilots.



3.1.3 Brochure

An initial brochure has been created to inform on the project details and also to provide information on the project consortium, as well as reference links and contact information.

The aim of the brochure is to clarify to the readers the different aspects of the project (challenges, opportunities, objectives, technologies, pilot sites, consortium members, etc.), as well as to motivate their engagement, in order to get the readers to subscribe to the newsletter and visit the website and social networks so that they are informed and committed to the project throughout its life.

This brochure can be adapted for each HYSTORE partner, depending on the event or workshop, to fit specific needs on request.

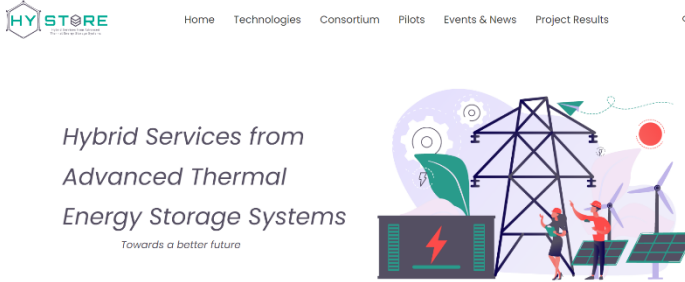


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3.2. WEB SITE

The project WEBSITE address is www.hystore-project.eu

The Home page



IMPACT

- Up to +120% energy density.
- -50% CAPEX.
- Lower design and installation effort thanks to pre-defined and standardized guidelines.
- Allow TES to be coupled and integrated with grid-level aggregators that can be federated in the context of both single buildings and local energy communities.
- Four use case applications in different climates both for District Heating/cooling connected and non DHC-connected buildings.
- LCOS of 0,05€/kWh/cycle over around 0,04 €/kWh by 2030, which is competitive with batteries.

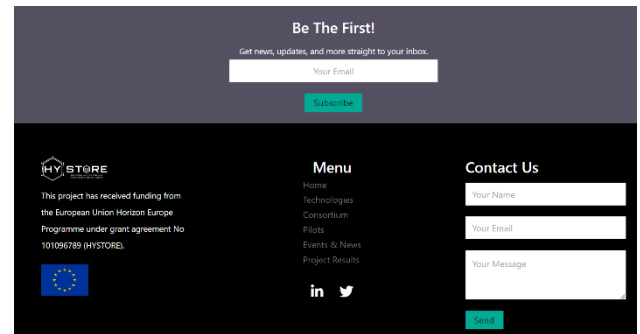
The final goal for Hystore is to realize the paradigmatic shift of thermal storage from an auxiliary service for HVAC systems to a building service which provides the expected comfort with high efficiency while supporting the grid for effective electric-thermal sector coupling.

What Is Hystore

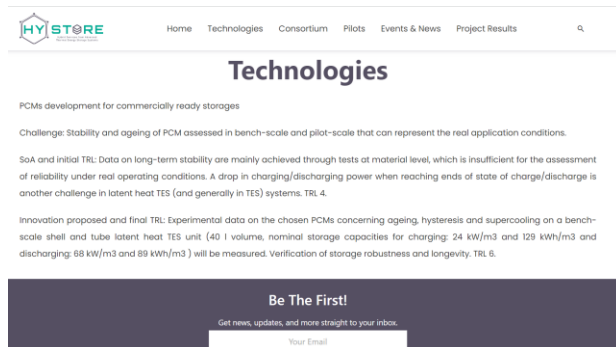
Develop and validate four innovative sets of Thermal Energy Storage (TES) concepts, based on PCM and TCM solutions.

The four novel concepts attain different applications:

- Heating and cooling
- DHW
- Provision of hybrid services (related to heat and power) thanks to a smart aggregator and an open-source multi-service platform.



Technologies



Consortium



 (ARC) ARMENIOL & ROS CONSULTORS I ASSOCIATI SLP ARCBen is a versatile energy engineering company specializing in technical system design across various fields of engineering and consulting. With expertise in technical installations, energy efficiency measures and Building Information Modelling (BIM), ARCBen is committed to expanding its presence in energy digitalization. The company's design solutions are tailored to the needs of its clients, ensuring success in any project they undertake. ARC's Role	 (CNR) CONSIGLIO NAZIONALE DELLE RICERCHE The National Research Council (Cnr) is Italy's largest public research institution, operating under the Research Ministry since 1923. With over 8,000 employees, including 4,000 young researchers, Cnr conducts research in its own Institutes, promotes innovation and competitiveness, advises government bodies, and contributes to human resource qualification. Cnr is a leading hub for multidisciplinary research in Italy, with a focus on advancing innovation and competitiveness in the national industrial system. CNR's Role	 (KTH) KUNGLIGA TEKNISKA HOEGSKOLAN (KTH) KTH Royal Institute of Technology is a leading technical university located in Stockholm, Sweden. Founded in 1827, KTH is one of Europe's premier institutions of technology and home to over 13,000 students and 1,700 doctoral students from around the world. KTH's research covers a broad range of fields, including engineering, technology, and natural sciences, and is dedicated to advancing innovation, sustainability, and societal impact. KTH's Role
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D8.1 Baseline Communication Package



<p>RUBITHERM Thermal Energy Storage</p> <p>(RUBI)</p> <p>RUBITHERM TECHNOLOGIES GMBH</p> <p>Rubitherm® Technologies GmbH is a leading company in phase change materials (PCM) technology, established in 1993. They specialize in developing specific product solutions for heating, air conditioning, transport of temperature-sensitive goods, and medical/therapeutic products. They provide inorganic and organic PCMs, refine PCM with micro- and macroencapsulation, and develop matrix carrier combinations of PCM. Rubitherm® is certified with ISO 9001 and a member of the RAL quality association for PCM, guaranteeing the thermal properties of their products.</p> <p>Rubi's Role</p>	<p>AIT INSTITUT FÜR TECHNOLOGIE</p> <p>(AIT)</p> <p>AIT AUSTRIAN INSTITUTE OF TECHNOLOGY GMBH</p> <p>The AIT Austrian Institute of Technology is an applied research and development institute based in Austria. With a focus on technology and innovation, AIT conducts research in areas such as energy, mobility, health and safety, and digital transformation. AIT works closely with industry partners and government organizations to develop solutions to real-world challenges and promote economic growth and social progress.</p> <p>AIT's Role</p>	<p>OCHSNER HEAT PUMPS</p> <p>(OCHS)</p> <p>OCHSNER WÄRMEPUMPEN GMBH</p> <p>OCHSNER Wärmepumpen GmbH is a family-owned business with a long history of providing energy-efficient solutions. Founded in 1978, the company is a leader in the production of heat pumps and has worked with renowned customers around the world, including the US Navy and NASA. OCHSNER's range includes both piston and screw compressors with outputs up to 500 kW. The company is known for its pioneering spirit, flair for innovation, and commitment to energy awareness.</p> <p>OCHS's Role</p>	<p>PINK</p> <p>(PINK)</p> <p>PINK GMBH - ENERGIE- UND SPEICHERTECHNIK</p> <p>Pink GmbH, based in Austria, is a company that specializes in providing high-quality services and solutions in the field of water, wastewater, and sludge treatment. With a focus on sustainability and innovation, Pink offers a range of services, including consulting, planning, construction, and operation of treatment plants. The company's mission is to provide sustainable solutions that meet the needs of clients while also protecting the environment.</p> <p>Pink's Role</p>	<p>Sorption Technologies</p> <p>(SOR)</p> <p>SORPTION TECHNOLOGIES GMBH</p> <p>SORPTION TECHNOLOGIES GmbH provides customized thermal chiller solutions, process cooling, trigeneration systems, adsorption desalination, and innovative cooling solutions. The company operates in Italy and Poland and offers plug-and-play and container solutions, as well as hybrid cooling solutions. They focus on innovation and R&D and have their own production facilities. SORPTION TECHNOLOGIES GmbH also provides computation, measurements, and CAD design services for its clients.</p> <p>SOR's Role</p>	<p>inovaLab</p> <p>(INOVA)</p> <p>INOVA LAB SRL</p> <p>Inova Lab is a research and development laboratory based in Luxembourg, specializing in material science and applied engineering. Their focus is on developing innovative and sustainable solutions for a wide range of industries, including aerospace, automotive, construction, and energy. Inova Lab provides customized research and development services, including material analysis and characterization, prototyping, and feasibility studies. The company's goal is to support its clients' innovation process by providing them with high-quality research and development services that meet their specific needs.</p> <p>INOVA's Role</p>
<p>STAM MASTERING EXCELLENCE</p> <p>(STAM)</p> <p>STAM SRL</p> <p>STAM is a multidisciplinary engineering firm offering high-tech and turnkey solutions in Industry 4.0 & Robotics, Space & Defence, Security & Transport, Energy & Bio-circular economy. They design and develop innovative mechanisms and mechatronic devices, provide production system definition, and focus on reuse and recycling. They expanded their expertise to include sensors, IoT, High Performance Computing, Cloud, and knowledge on smart materials, bio-based solutions, and complex value-chains. They have a network of 500+ clients and partners across EU and beyond.</p> <p>STAM's Role</p>	<p>MASTON</p> <p>(MAST)</p> <p>MASTON AB</p> <p>The Maston Group is an international energy company that has been developing renewable energy and climate resilience innovations for over 30 years. With a focus on increasing system efficiency and minimizing environmental damage, their work benefits both the planet's economic base and the world economy as a whole. Maston has been awarded numerous technology awards and has established manufacturing capabilities around the world, building on their expertise in electric vehicles, synthetic fuel development, and large-scale power plant design.</p> <p>MAST's Role</p>	<p>DCU Dublin City University</p> <p>(DCU)</p> <p>DUBLIN CITY UNIVERSITY</p> <p>Dublin City University (DCU) is a leading university in Ireland with a strong focus on sustainability and energy research. DCU's Sustainable Energy and Environment Research Centre (SEERC) is dedicated to driving the transition to a low-carbon economy. DCU partners with industry leaders and government agencies, such as ESB and the Sustainable Energy Authority of Ireland, to address global energy challenges and develop sustainable solutions. DCU also offers a range of programs, including the MSc in Climate Change: Policy, Media and Society, to prepare students to tackle climate change and build a sustainable future.</p> <p>DCU's Role</p>	<p>eurac research</p> <p>(EURAC)</p> <p>ACCADÉMIA EUROPEA DI BOLZANO</p> <p>The Accademia Europea di Bolzano, also known as the European Academy of Bolzano/Bolzano, is a research and higher education institution located in Bolzano, Italy. It was founded in 1992 and focuses on interdisciplinary research in the fields of applied social sciences, including economics, management, and regional development. The academy offers bachelor's and master's degrees, as well as PhD programs and executive education courses. It has a diverse faculty and student body from across Europe and around the world, and collaborates with many international partners in research and education.</p> <p>EURAC's Role</p>	<p>R2M RESEARCH & INNOVATION SOLUTION</p> <p>(R2M)</p> <p>R2M SOLUTION SRL</p> <p>R2M Solution Srl. is an integrated and multi-disciplinary entrepreneurial innovation company that aggressively targets filling the gap between research activities and market implementation across the fields of Innovation, Engineering, Energy Services & Sustainability and ICT/Automation. R2M is a strategic innovator itself and as part of its business model helps organizations and projects plan and execute the strategic use research funding carried out over a comprehensive development strategy from idea to market. In doing so, R2M provides leadership, links high performance exploitation-oriented networks, and leverages public and private funding instruments.</p> <p>R2M's Role</p>	<p>UCD UNIVERSITY COLLEGE DUBLIN</p> <p>(UCD)</p> <p>UNIVERSITY COLLEGE DUBLIN, NATIONAL</p> <p>University College Dublin (UCD) is a research-intensive university in Dublin, Ireland, with over 33,000 students from 126 countries. It was founded in 1854 and has a diverse range of programs across seven colleges. UCD is committed to excellence in teaching, research, and innovation and has a strong reputation for academic and research achievements. Its campus is located on 133 hectares of parkland and is home to a wide range of sports and cultural facilities.</p> <p>UCD's Role</p>
<p>Montserrat</p> <p>(CRM)</p> <p>CENTRAL DE RESERVES DE MONTSERRAT SA</p> <p>Central de Reserves de Montserrat SA (CRM) is a company that manages the online reservation system for accommodations, restaurants, and activities in the Montserrat area. The area is home to the Montserrat Monastery, a popular destination for pilgrims and visitors from around the world, which was founded in 1025 and has a rich history of miracles and wonders performed by the Virgin Mary. Despite its long history, Montserrat has been modernized to meet the needs of visitors and continues to be an important spiritual and cultural center.</p> <p>CRM's Role</p>	<p>RAAL RAAL SA</p> <p>(RAAL)</p> <p>RAAL SA</p> <p>RAAL is a leading manufacturer of advanced cooling solutions made from aluminum alloys and stainless steel. With 30 years of experience, RAAL has completed thousands of projects for various applications, demonstrating their ability to adapt to the needs of their customers. The company's commitment to innovation and high-tech research is evident through their R&D team, which helps customers differentiate their products in the market through cutting-edge performance and design. RAAL serves the agricultural, construction, industrial equipment, and automotive industries with its range of brazed construction cooling systems.</p> <p>RAAL's Role</p>	<p>EIM EUROPEAN INNOVATION MARKETPLACE ASBL</p> <p>(EIM)</p> <p>EUROPEAN INNOVATION MARKETPLACE ASBL</p> <p>EIM ASBL is a non-profit organization offering research, innovation, tech transfer and advisory services to private companies, public and institutional organizations in areas such as energy, ICT, circular economy, and industry 4.0. Their mission is to bridge the gap between research and the final market by providing targeted support to European research and innovation activities. EIM combines high-quality internal expertise with a global network of innovation experts to become a key player in promoting and spreading EU innovation.</p> <p>EIM's Role</p>			

PILOTS

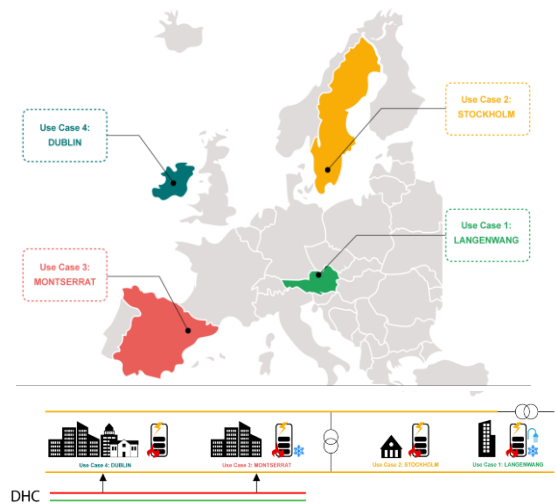


Pilots

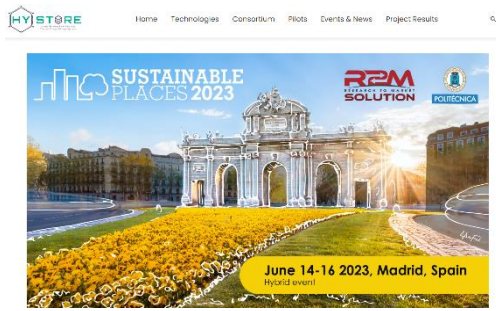
The applications developed will be deployed for four distinct use cases, each with its unique set of requirements and challenges. To ensure the success of the project, a representative business model will be selected for each use case, tailored to the specific needs and goals of the intended users. By carefully selecting the appropriate business model for each use case, the project team will be able to maximize the value and impact of the applications developed. The selected business models will also take into account factors such as the target market, revenue streams, and scalability, among others.

<p>Use Case 1: LANGENWANG</p> <p>What: PCM-ALL-IN-ONE</p> <p>Use case: multi-purpose building</p> <p>Building services: heating, cooling, DHW</p> <p>Grid services: peak shaving and shifting, demand-side management</p> <p>Replication scope: other close mixed residential/industrial districts</p>	<p>Use Case 2: STOCKHOLM</p> <p>What: PCM HEATING + smart platform</p> <p>Use case: residential building</p> <p>Building services: heating</p> <p>Grid services: peak shaving and shifting, demand-side management</p> <p>Replication scope: overall campus and other close residential districts</p>	<p>Use Case 3: MONTSERRAT</p> <p>What: TCM H&C + low T H&C PCM D+ smart platform</p> <p>Use case: heterogeneous complex with High RES share</p> <p>Building services: heating and cooling</p> <p>Grid services: peak load shifting, frequency and voltage regulation</p> <p>Replication scope: overall complex D(10 buildings) and mid-scale DDHC (2.5 MWth)</p>	<p>Use Case 3: DUBLIN</p> <p>What: TCM H&C + smart platform</p> <p>Use case: heterogeneous complex (university campus) with high RES share</p> <p>Building services: heating</p> <p>Grid services: higher RES usage, peak shaving, balance management</p> <p>Replication scope: overall campus (30,000 people) and other Northern countries multi-functional buildings</p>
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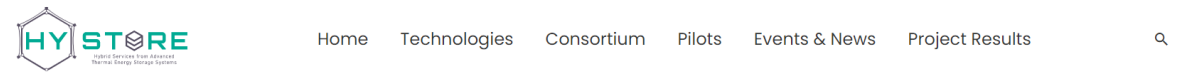
Additionally, the selection of representative business models for each use case will enable the project team to gather valuable insights and feedback from the users, which can then be used to further improve and refine the applications over time. Ultimately, this approach will help ensure that the project delivers tangible benefits and outcomes for all stakeholders involved, from the developers to the end-users.



EVENTS



Project Results



Project Results

We're excited to announce that the results of our European Research Project will be announced soon! Stay up to date by subscribing to our email list or checking back on our website for the latest updates. We can't wait to share our findings with you!

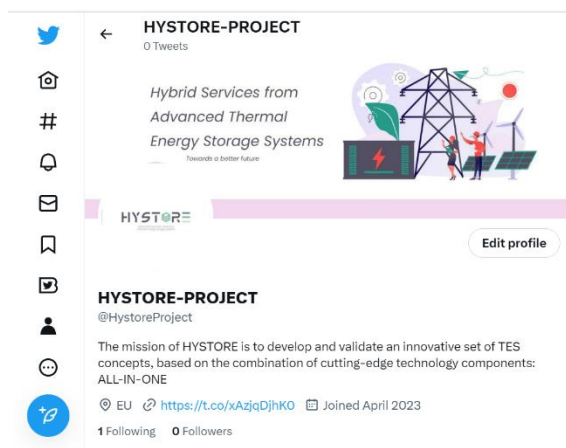


3.3. SOCIAL MEDIA

HYSTORE is communicating on Twitter and LinkedIn, promoting the project, disseminating its progress and generating a progressively growing network of members and followers. In both social media we are sharing news, updates, events in which we participate, and other contents of interest.

3.3.1 TWITTER

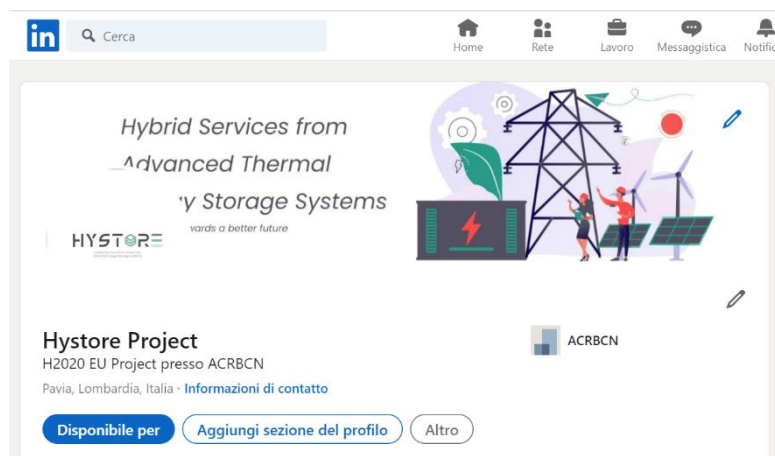
The Twitter account was published on <https://twitter.com/HystoreProject>



We will be linked, among other users, to the European Commission and its different agencies and organizations, to the H2020 sister projects and Horizon Europe - Life thematic projects well as stakeholders, public authorities, investors and potential users.

3.3.2 LINKEDIN

The LinkedIn page is targeted to professionals, stakeholders, potential users, public authorities, investors. It was created <https://www.linkedin.com/in/hystore-project-208270274/> will be member of related H2020 featured groups.



4. Conclusions

The communication materials first package consists in the creation of the corporate visual identity of the project and the launch of the website to provide partners, stakeholders, journalists, followers of the project and also general public, a fundamental knowledge of the HYSTORE project. Through a set of different communication materials (PowerPoint presentation, brochure, roll-up poster, etc.), HYSTORE social, climatic, economic, energy and technological context has been introduced, as well as the challenges the project faces, the proposals and solutions it offers, the technologies and innovations on which it relies, its different pilots, and its different channels and contact points to encourage further engagement and follow-up with the project throughout its whole life.

In the next elaboration of communication materials stage, a further step will be taken, through the launching of the first video of the project a more complex and elaborated communication material that will help to deepen the understanding of the project and its progress, and to continue encouraging active involvement with the project.

OUR TEAM



See you online!



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