

Horizon Europe Work Programme



D7.2 – PUBLIC PROJECT WEBSITE

Lead Contractor: 1CUBE

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¹ PU = Public

CO = Confidential, only for members of the consortium (including Commission Services)

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17/10/2022	1	S. Scoppa	First Version
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Executive summary

This document reports the development of the website of the AMBHER project. In particular it is reporting the public version of the website.

The deliverable is a deliverable type DEC (Websites, patents filing, press & media actions, videos, etc.) and as such, this document only reports some description and pictures of the actual website.

As for an error in the DoA, the deliverable is assigned to TECNALIA in the SEDIA system, but the website is developed and managed by 1CUBE. For this reason, the report is also written by 1CUBE.

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1 INTRODUCTION

As part of the Dissemination and Communication actions, one of the most powerful tools to be used by AMBHER project is the public website.

The open part of the website is used for both communication and dissemination of results. Public deliverables can be downloaded from the website.

This deliverable report shows some of the features of the public website and reports some pictures as well.

It remains a task of 1CUBE to upload all contents on the website as soon as it is made available from partners, thus the website has to be seen as a living environment that will grow as the project progresses.

2 Background of the AMBHER project

AMBHER (Ammonia and MOF based Hydrogen for Europe) is a European project providing a holistic approach to tackle the short- and long-term energy storage challenges raised by the high degree of electrification our society is aiming for. Firstly, AMBHER is addressing the main societal, economic and technological questions coming together with the use of green ammonia as seasonal renewable energy storage. Simultaneously, AMBHER is developing and demonstrating innovative and cheaper compressed hydrogen storage potentially solving the gap toward local and economically relevant power-to-hydrogen hub.

AMBHER will thus increase the number of applications in the energy and transport sectors and the possibilities for success and industrial adoption by key players. For short-term hydrogen storage, novel nanoporous MOFs (Metal Organic Frameworks) of high surface area (>2.500 m²/g) and low-cost synthesis will be developed following an original shaping process (3D printing). Furthermore, AMBHER will develop a conformable cryo-vessel that can accommodate stacks of MOF bodies of tailored-made shape.

A capacity of 40 g/L of usable space at 100 bar is achieved at competitive cost with respect to current high-pressure cylinders. For long-term storage, advanced materials (both catalysts and membranes) and their combination in an intensified 3D-printed intensified periodic open cell structured reactor will be developed to allow hydrogen storage in the form of ammonia (NH₃) in a cost-efficient and resource-effective process at lower temperatures and pressures compared to conventional systems. AMBHER project is validating both solutions at TRL 5 addressing the positioning of the solutions developed in relevant business cases.

AMBHER project will contribute to the objectives of the European Green Deal towards making the European Union (EU) climate neutral in 2050. It will play an important role in addressing some of the key challenges facing today's global society, such as the cost of energy, energy security and climate change. It will not only reduce the EU's energy dependence, but also make its energy system more resilient by balancing the energy generation and consumption curve facilitating the integration of the renewable energy in the grid through long-term storage hydrogen technologies.

The use of renewable energy storage solutions in the short and long term enables the decarbonisation of many sectors that would otherwise be difficult to decarbonise, such as transport sector. These innovations will have an impact on the entire value chain of these sectors and improve the overall competitiveness of the European economy. AMBHER will also contribute to the generation of wealth by creating around 20,000 jobs (direct, indirect and induced) accumulated (2030-2035).

It will connect material developers with key players in the hydrogen economy, additive manufacturing companies, chemical companies and end-users of ammonia, matching existing needs and new products with the essential link provided by innovative organizations that are capable of developing advanced technologies that will meet the challenges of the coming years.

3 Public Website

The AMBHER project website has been developed according to schedule. The project website is accessible at <https://www.ambherproject.eu/> . To make sure the website is always accessible, the domain ambherproject.com has also been acquired and it is linked to the ambherproject.eu

An impression of the project is reported in the figure below

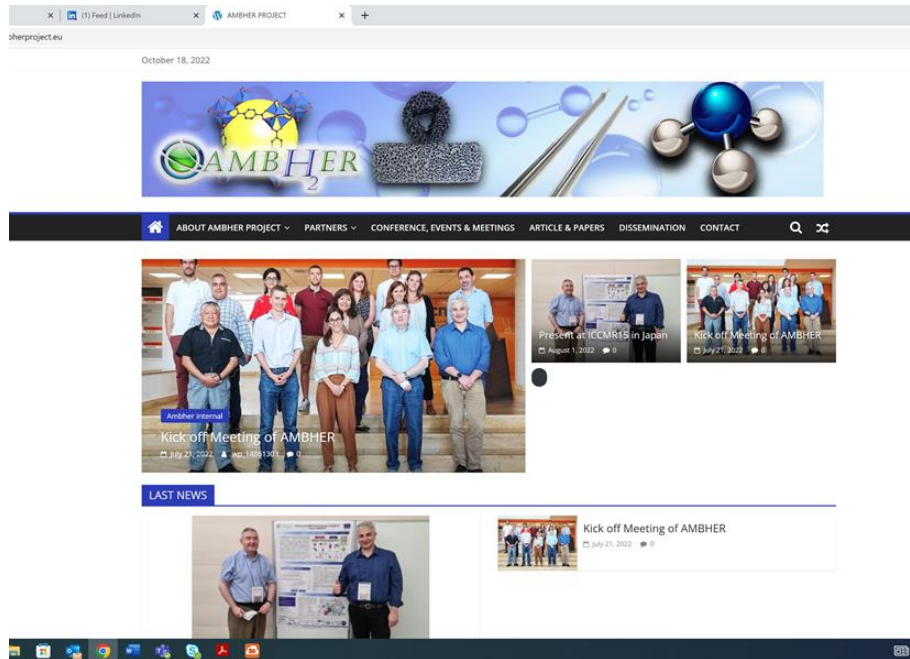


Figure 1. AMBHER project website, home page.

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

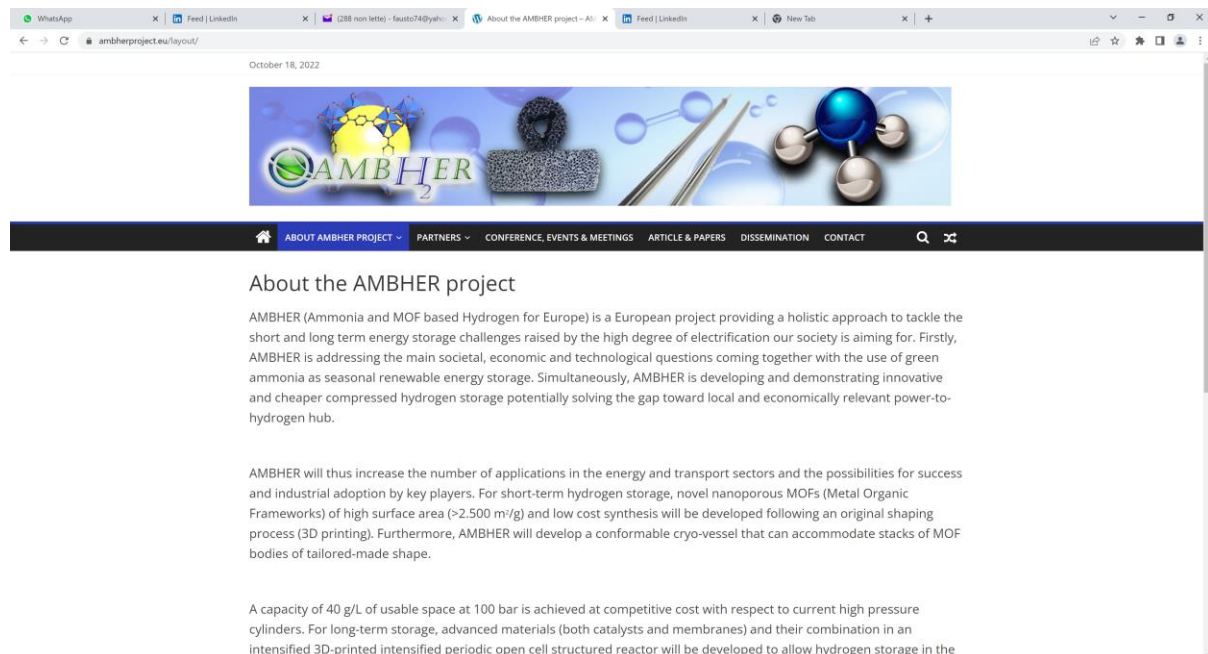
The role of the website in the communications strategy is to provide a place for people interested in the project to get more in-depth information about the project activities and results. The dedicated website will produce an extensive record of all publications and communications originated on the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

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

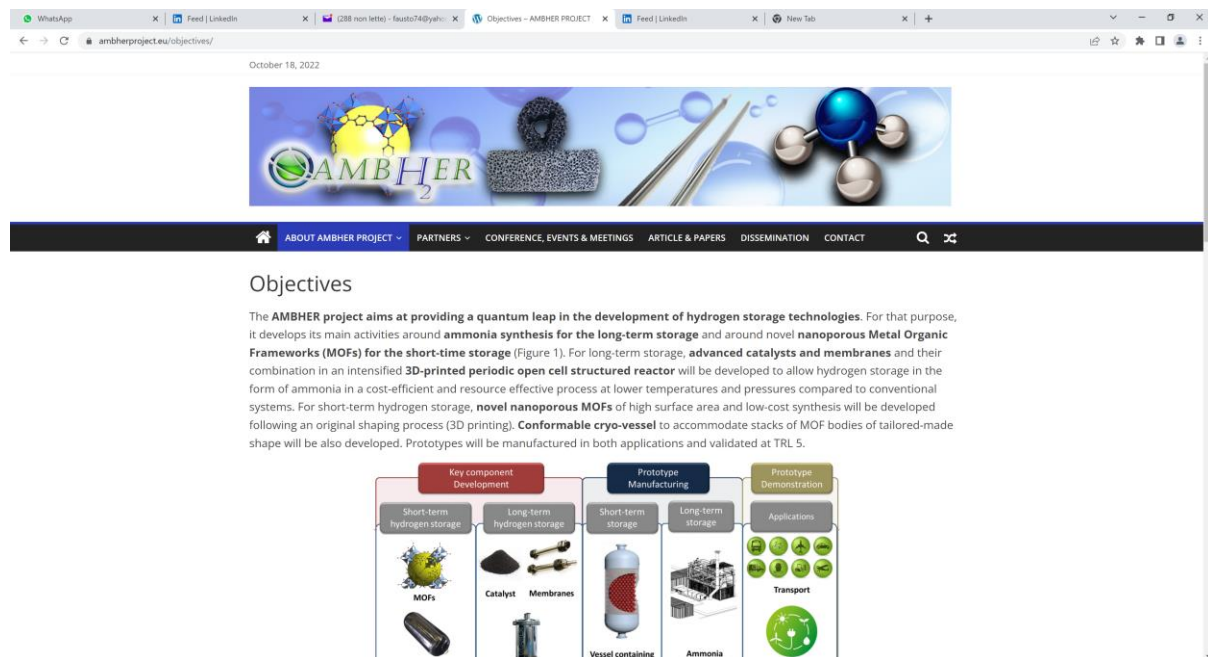
- Home
- About AMBHER project: Introduction – Objectives – Expected results and Long term impact
- Partners
- Conferences, Events & Meetings
- Articles and papers
- Dissemination
- Contacts

The Homepage also reports all news, and the website is designed in such a way that the latest news are always visible in each page of the website.

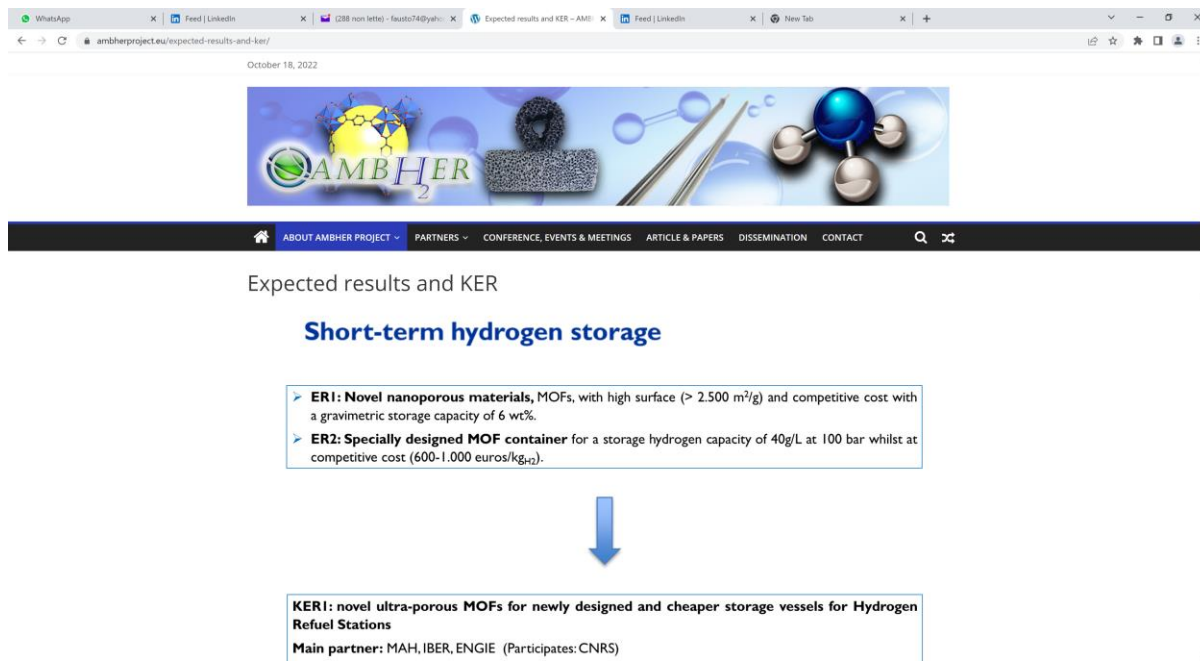
Most of the public information of the AMBHER project are summarized in the first menu tab, that starts with a short description of the AMBHER project as seen below



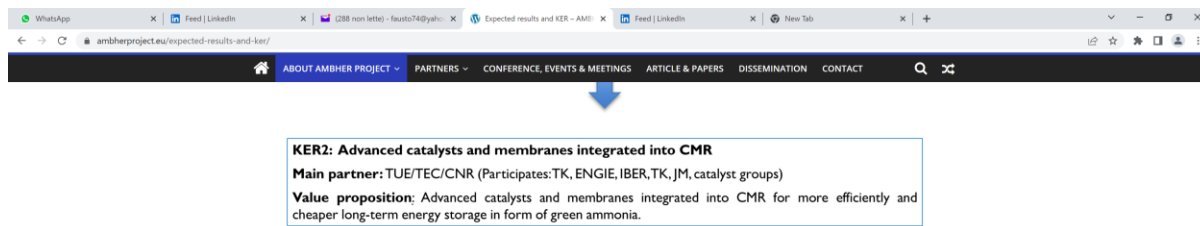
The same menu also reports the objectives as shown below



The expected results are also summarized in the same menu



It is also worth mentioning that all pages have the quite prominent bottom part reporting the information about the funder and the call, as well as the links to the social media (see below)

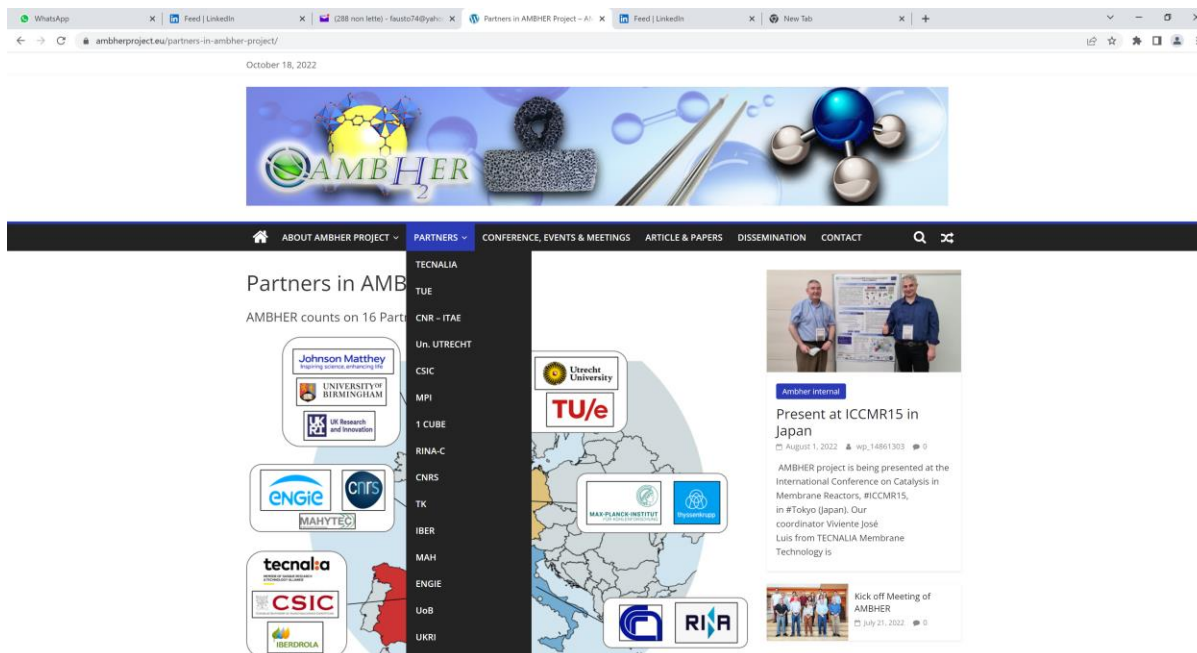


The next menu is the description of the consortium with a map reporting the different partners

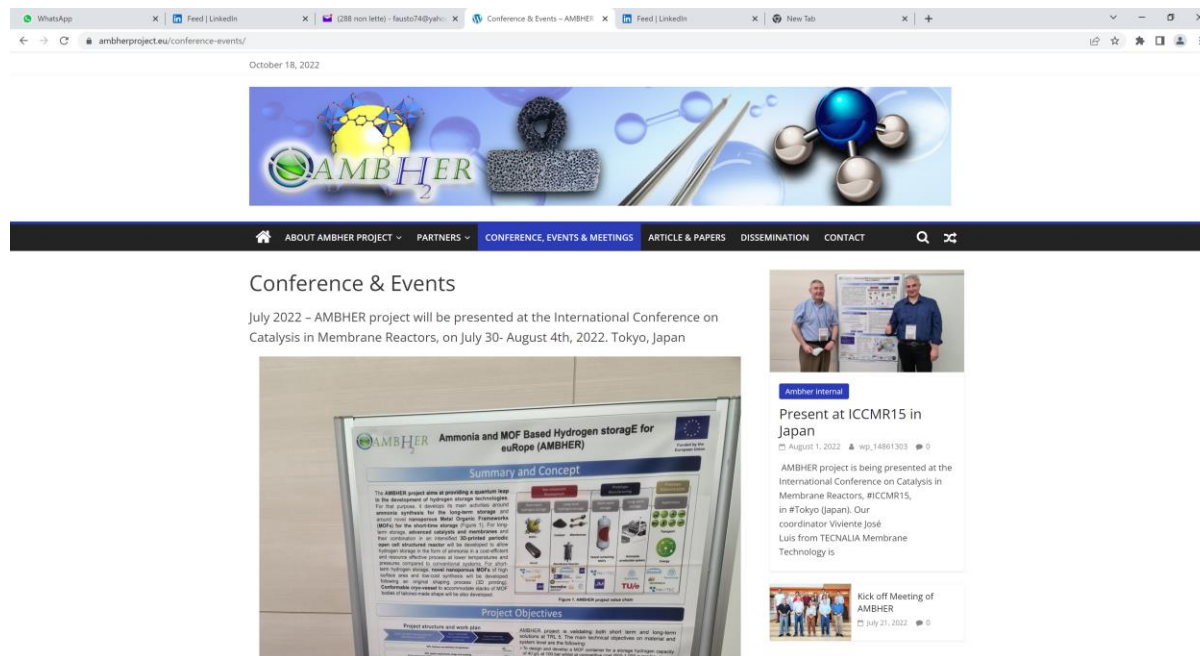


All the news will always be visible in the homepage as well as in each relevant page of the website.

In the same menu of the partners, the complete list of partners is visible (and clickable)

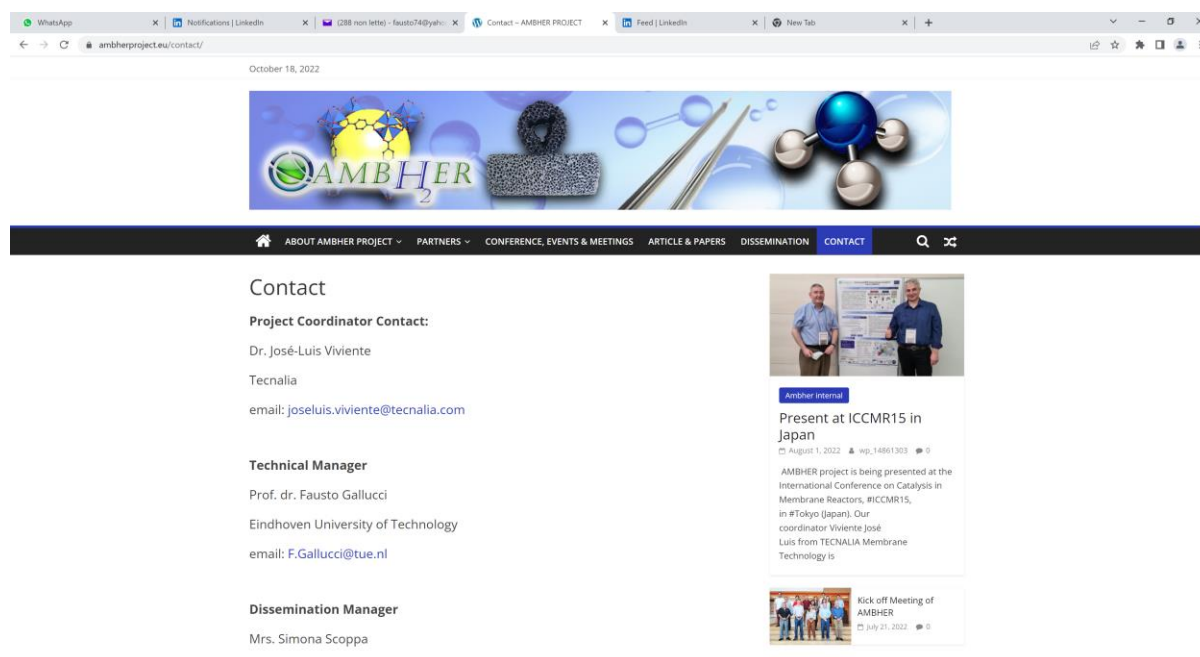


The website contains also the tab Conference&Events where all events related to AMBHER (internal or external) will be reported. Despite being at the beginning, the page already reports the info on the first event where AMBHER was presented (International Conference on Catalysis in Membrane Reactors)



The next sections report the papers and other dissemination materials, which will be populated as soon as the scientific and dissemination materials are available.

Finally, the last tab is the contacts page with all contacts for the project



4 Conclusions and future steps

This Report shows the public website of the AMBHER project. The website is being already advertised through the social media and it is the portal towards the results of the project.

The website will be populated as the project progresses and will also be used to store the publicly available AMBHER related contents such as the newsletters, papers, presentations etc.