

ENSNARE - ENvelope meSh aNd digitAl framework for building Renovation

Author:

R2M Solution

WP Leader:

R2M Solution

GA: 958445

www.ensnare.eu



Document Information Table

Grant agreement no.	958445	
Project full title	ENvelope meSh aNd digitAl framework for building Renovation	
Deliverable number	D8.1	
Deliverable title	Communication Handbook	
Type of Deliverable	R (Report)	
Dissemination level	PU (Public)	
Version number	2	
Work package number	WP8	
Work package leader	R2M Solution	
Partner responsible for Deliverable	R2M Solution	
Reviewer(s)	Peru Elguezabal (TEC)	
Approval Date	30/04/2021	

"This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no 958445"

This document reflects only the author's views and the Commission is not responsible for any use that may be made of the information it contains.

This document and all information contained here is in the sole property of the ENSNARE Consortium. It may contain information subject to Intellectual Property Rights. No Intellectual Property Rights are granted by the delivery of this document or the disclosure of its content. Reproduction or circulation of this document to any third party is prohibited without the written consent of the author(s). The dissemination and confidentiality rules as defined in the Consortium agreement apply to this document. All rights reserved.



Revision Table

Version	Date	Modified Page/Section	Author	Comments
1	21/04/21	First version	Luis Febres, Tiago Loureiro, Raymond Sterling and Federico Noris (R2M)	First draft
2	28/04/21	Second version	Peru Elguezabal (TEC)	Revised version
3	30/04/21	Final version	Luis Febres, Tiago Loureiro, Raymond Sterling and Federico Noris (R2M)	Submitted



Contents

Document Information Table	1 5 6
Executive summary	
1 Introduction	
2 Project Identity	7
2.1 Acronym	7
2.2 Logotype	7
2.3 Templates	8
3 Communication Channels	11
3.1 Website	11
3.1.1 Website content: Design and architecture	12
3.1.2 Front page	12
3.1.3 Why ENSNARE	14
3.1.4 About	15
3.1.5 Expected Results	16
3.1.6 Consortium	16
3.1.7 Pilot Sites	17
3.2 Social Media	18
3.2.1 LinkedIn	18
3.2.2 Twitter	19
4 Conclusions	19



List of Figures

- Figure 1. ENSNARE Colours Palette.
- Figure 2. ENSNARE Logotype.
- Figure 3. Document template.
- Figure 4. Presentation template.
- Figure 5. Brochure Template.
- Figure 6. Poster Template.
- Figure 7. Newsletter Template.
- Figure 8. Website navigation panel
- Figure 9. Website Front page.
- Figure 10. "Why ENSNARE?" Website section.
- Figure 11. "About ENSNARE" Website section.
- Figure 12. "Consortium" Website section.
- Figure 13. "Pilot Sites" Website section.
- Figure 14. ENSNARE LinkedIn profile
- Figure 15. ENSNARE Twitter profile



Executive summary

This document shows the implementation of the main branding and communication tools and materials for the ENSNARE project, comprising the project identity, communication channels and communication materials, which are integral elements of the WP8 ("Dissemination and business strategies for near future marketing and exploitation") and will ensure the project's visibility and facilitate the diffusion of results. The website provides a platform for interested parties to quickly gain access to key project facts, scope and objectives. The ENSNARE project website and social media will be continuously updated throughout the duration of the project with news, information and publications as new content, findings and results are generated by the partners in the different work packages. R2M will be responsible for maintaining the website and social media channels throughout the project lifecycle, and oversee their evolution from inception to completion. The project's brand fulfills several purposes, most notably to allow for a unified and recognizable identity. Through the project's lifecycle, more and detailed communication materials (i.e. poster, brochure, newsletters, video, etc.) will be created, targeted to different specific stakeholders.



1. Introduction

In general terms, each European project could be considered as a brand, as it contains a name, acronym, symbolic language and values that distinguish it from other initiatives. In order to ensure an effective communication and dissemination, it is necessary to build a strong and recognizable visual project identity and to guarantee its coherent application. With this aim, ENSNARE project has developed its graphic storyline represented by a logotype, colour schemes, templates and different kinds of online and offline dissemination materials. Additionally, a visual identity manual has been developed in order to establish the rules to be followed when graphically representing the ENSNARE brand. All the templates are accessible from the internal project website.



2. Project Identity

2.1. Acronym

In the English language, the word "ensnare" is a verb that means "to catch or control something or someone. In line with this and the fact that one of the main objectives of the project is to develop an enveloping mesh capable of "ensnare" information of the energy behavior of buildings to be analyzed in real time, we have built the following acronym from the title of the project:

ENvelope me**S**h a**N**d digit**A**l framework for building **RE**novation

ENSNARE

2.2. Logotype

In the markets, the main tool that brands use to differentiate and identify themselves is its logo and colours; for this reason, a strong visual identity as a brand is crucial to be able to share and transmit the values and objectives of the ENSNARE project as well as to allow stakeholder to remember and recognise the project. Based on the fact that the main objective of the project is to develop a dynamic methodology in which the elements of the façade interact in real-time with the digital world, a logo has been developed representing the transition and digitization of the information obtained by the different elements (modules) of the envelope and its associated mesh.

Our logo is composed of a modular envelope represented by the main body of the graphic which is defragmented, representing the digitization process of the information, this logo reading can also be done in reverse, where the digital fragments are reconstituted in the modular envelope. On the other hand, at the bottom, we can find our commercial name "ENSNARE". The colours used are striking and fulfil the main function of attracting attention without disturbing the visual field of the readers. This combination of elements makes the logo fulfil its main objective of capturing and transmitting.

ENSNARE Colours Palette

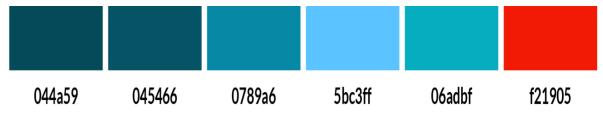


Figure 1. ENSNARE colour Palette.

ENSNARE Page 8 of 19



ENSNARE Logotype



Figure 2. ENSNARE logotype.

2.3 Templates

In order to establish standard communication documentation for all the parties involved in the project, templates have been created to have uniform format for slides and presentations. The aim is to ensure consistency and coherence among the work performed by different partners.

Template for documents



Figure 3. Document template.



Template for Presentations

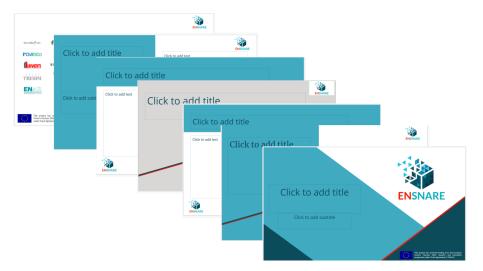


Figure 4. Presentation template.

Template for Brochure

The template for the project brochure has been developed. The idea is that all partners can use the brochure as a resource to easily disseminate the project in different scenarios and events.





Figure 5. Brochure Template.

Template for Poster

The template for the Poster has been created, size A0. In the next figure a first draft of the poster that will be used in the dissemination activities is shown. Regarding the visual

ENSNARE Page 10 of 19



aspect, it can be seen the same colours, letter style and images that are present in the other communication material.





Figure 6. Poster Template.

Template for Newsletter

Newsletters are an ideal tool, among others, for the digital dissemination of information as well as to engage and attract stakeholders. With this tool, ENSNARE can achieve greater impacts, since the action ratio is significantly higher than other communication channels. For this reason, newsletters will be issued with a periodicity of 6 months with updated content focused on capturing the attention of future interested parties.



Figure 7. Newsletter Template.



3. Communication Channels

3.1 Website

The url of the ENSNARE website is https://www.ensnare.eu/, which went live during M4 of the project. The website contains summary information about the project, the partners, the pilots, the developments as well as the possibility for users to get in contact with the project directly or by joining the stakeholder group.

There are several purposes for a project website, most notably to allow for a unified identity and a platform for interested parties to quickly gain access to key project facts, scope and objectives. In order to make the website a lively environment with an identifiable brand identity, eliciting user involvement and gathering relevant data to support the achievement of project objectives, several methodologies will be borrowed from e-marketing best practices. This expanded visibility will help to convey a holistic and accurate depiction of project goals and results while stimulating two-way communications, both internally and externally.

The website was designed and implemented by R2M, using the open source WordPress content management system (CMS). The current version of the website will change and evolve over time as project mature and relevant information become available, fostering organic growth and in full consideration of the changing demands of its users.

R2M will maintain the website throughout the project lifecycle, and oversee its evolution from inception to completion. Supportive communication channels heavily linked within the project website will align with current digital trends, and technical standards. Some examples include, but are not limited to, Twitter, LinkedIn, email newsletter as well as place for stakeholders and users to engage and get in contact with the project. Unifying semiotics and colour schemes, as well as effective linkage to sister platforms and partnering websites, will ease the browsing process in parallel to increase stakeholder engagement.

3.1.1. Website content: Design and architecture

The website starts with a high-level perspective and indicates a clear path to find more technical and non-technical details as well as entry points for collaborations. The website is structured in 6 sections, as indicated in the figure below:



- 1. Main page
- 2. Why ENSNARE
- 3. About
- 4. Expected Results
- 5. Consortium
- 6. Pilot Buildings



Figure 8. Website navigation panel

3.1.2. Front page

The front page is the website home page and where users will be re-directed by clicking on the logo.

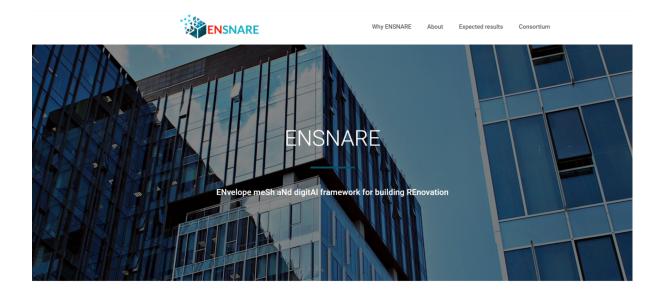


Figure 9. Website Front page.

This project has received funding from European Union's Horizon 2020 research and innovation programme under grant agreement n° 958445

ENSNARE



3.1.3. Why ENSNARE

This section of the website covers the background and motivation for the project.

WHY ENSNARE?

The building sector is one of the main contributors to GHG emissions, being 40% of the energy consumption in the EU associated with building needs, mainly for heating, cooling and domestic hot water purposes. In order to achieve 2050 decarbonisation goals, significant increase in the low renovation rates is needed. ENSNARE provides a systemic methodology combining products, systems and solutions that will facilitate and boost the adoption of novel and advanced technologies during renovation

The building envelope is a fundamental element since typically at least 75% of heat losses occur through the envelope comprising façade, roof and windows. Therefore, improving the envelope represents the basic requirement when undergoing a renovation project and, to achieve NZEB targets, advanced functionalities are required for this element that should go beyond current passive thermal barrier to become an active element (integrating energy harvesting, storage and distribution technologies).

This improved renovation process must leverage advances in ICT, digitalization, automation and robotics of industry to overcome the lack of a comprehensive approach to encompass current technologies and to facilitate communication between potential users and technology developers.

ENSNARE will boost the uptake of novel and highly efficient solutions for NZEB renovation via comprehensive methodology, tools and technologies that will accelerate the current renovation rate.

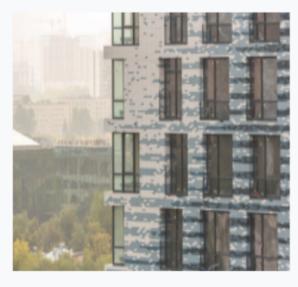


Figure 10. "Why ENSNARE?" Website section.

This project has received funding from European Union's Horizon 2020 research and innovation programme under grant agreement n° 958445

ENSNARE Page 14 of 19



3.1.4. About

This section summarises the goals and main elements of the projects with an intuitive schematic.



ABOUT ENSNARE

The main goal of the ENSNARE project is to boost the implementation of NZEB renovation packages in Europe, with a focus on residential buildings. To accomplish this objective, the project develops two main technologies: Building components and digital solutions. The deployment of these two is founded in two key structures developed within ENSNARE: (see Figure):

- Envelope mesh, fully modular and based on industrialized principles, enables fast assembly and interconnection of all components and energy/data networks, including technologies for energy harvesting, storage and distribution.
- 2. Digital platform provides a framework to stakeholders with a clear structure and access to a wide range of technologies for deep renovation of buildings. It supports all stages of the renovation, from early decision making and data acquisition to the manufacturing, construction, and the operation and maintenance of the implemented system. The platform makes use of a digital toolbox (i.e., modular tools) closely linked to a digital model of the buildings, which in its final stage become a Digital Twin allowing real-time control, simulation and operation of all building components.

Within a comprehensive systemic approach and the above 2 pillars, the project will develop:

- Modular adaptable components to be integrated within
 the system, including an active window for ventilation and
 heat recovery, solar harvesting devices (thermal
 collectors, PV and hybrid panels with advanced
 technologies such as roll-bonding), heat pumps and
 energy batteries for load shifting.
- A set of digital tools that will connect to the digital
 platform to support and accelerate all stages for a more
 efficient and automated renovation process: automated
 data acquisition, LCA/LCC analysis and decision support,
 digital BIM model building and computer-assisted
 manufacturing (CAM), and a smart building management
 system (sBMS) for optimised operation and maintenance.
- Digital Twin that starts as a simplified digital model and increases in complexity and interaction potentialities as the project develops. At completion, the model becomes a Digital Twin of the renovated building allowing real-time monitorization, simulation and optimised operation of all building components.

Figure 11. "About ENSNARE" Website section.

This project has received funding from European Union's Horizon 2020 research and innovation programme under grant agreement n° 958445

ENSNARE Page 15 of 19



3.1.5. Expected Results

The expected results that the consortium plans to deliver will be summarised here with some additional information presented in a user-friendly way to attract interest from potential users.

3.1.6. Consortium

In this section of the website, project partners are introduced and the links to their social media and websites included.

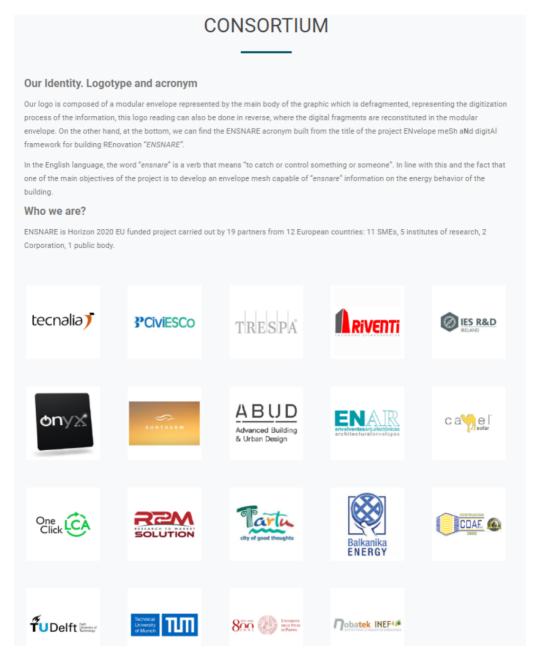


Figure 12. "Consortium" Website section.

research and innovation programme under grant agreement n° 958445

ENSNARE

Page **16** of **19**



3.1.7. Pilot Sites

In this section, descriptions and images of both the physical and the virtual pilots are included with additional updates about the advancement of the solution deployment and achievements.



San Demetrio, Italy

façade 942 m², 58 windows, 7 dwellings, 180-200 kWh/m² year



Glaslow, UK

PILOT SITES

The ENSNARE solution will be validated through 3 pilot renovation projects covering Nordic, Continental and Mediterranean climates, and 3 virtual demonstration buildings aimed at upscaling the development of the solution. These demonstrators have been selected to show the replication possibilities of the project, mostly in terms on advanced and improved retrofitting activities. The buildings have been chosen to represent the largest European construction residential market in different climatic conditions (Estonia, Bulgaria and Italy for Demos and UK, Italy and Netherland for the virtual ones) and different architectural implementations. The adoption of different seized buildings (- 500 m2, -0100m2 and - 3000m2) to be renovated with a different level of previous energy consumption level (80 – 200 kWhm2) allows to test and scale up procedures aiming to provide relevant inputs to study the industrialization, mass production and economy of scale based measurements to be adopted.



M B I A B

Tartu, Estonia

façade 442 m², 26 windows, 10 dwellings

Tartu pilot is situated in North-East of Tartu in Annelinn district. The pilot is a 2-storey residential used as a rehabilitation center for the exconvicts. The goal for Tartu is to fully removate the facility to provide a higher level of services and living conditions for men and women reentering the society. The center will house up to 16 inhabitants in 8 apartments, include a security room, staff room, a meeting and service room and laundry room. The goal is to provide the risk group with stable and high quality living conditions enabling a smooth transition into open society. The building will be renovated into near-zero energy building to minimize the building running costs for the NGO providing the social transition service for the inhabitants and the city.





Sofia, Bulgaria

façade 471 m² , 42 windows, 6 dwellings, 80-100 kWh/m² year

The pilot site in R. Bulgaria is located in the Boyana neighbourhood of Sofia — the capital of Bulgaria. The demo-ate is a two-floors multi-family apartment building that was completed in 1974. In 2004, a total renovation was conducted and new part was added to the building. It has been continuously inhabited throughout its whole lifespan, currently, by floor families. The building had been designed to have a total of 6 apartments on 4 levels, 2 on each floor. Throughout the years, some of them have been combined into separate habitations. Total floor area is approximately 560 m². Additionally, there is a heated semi-basement, an open terrace on the last floor, connected to the central staircase. The roof is mostly flat and exposed façades oriented towards South-East and South-vest. The total area of the facade is 471 m2. The building has a total of 42 windows, with an average annual energy consumption of 80-100 kWhyleye.

Figure 13. "Pilot Sites" Website section.



3.2. Social Media

The selected social media platforms to promote the ENSNARE project are Twitter, for the general public, and LinkedIn, for more targeted stakeholders. Both social media accounts were created by R2M on WP8 of the project. At the website footer, the icons of both Twitter and LinkedIn are displayed, taking the users to ENSNARE social media accounts with one click. Once new dissemination material is created, additional media channels could be created if necessary, like, for example youtube.

As names for the social media accounts, we have chosen @ENSNARE for LinkedIn and @ENSNARE_H2020 for Twitter to share the ENSNARE team's vision and technological solutions.

3.2.1. LinkedIn

A LinkedIn profile was created in order to further disseminate the project among professionals in the building and sustainability sector, create debates and share useful information. You can get access here.



Figure 14. ENSNARE LinkedIn Profile



3.2.2. **Twitter**

A Twitter account is useful to spread information about the project to a wider audience, as well as sharing the developments and resources of ENSNARE along the course of the project's life cycle. You can get access here.

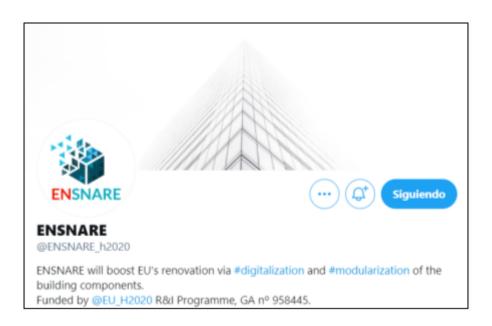


Figure 15. ENSNARETwitter Profile

4. Conclusions

The current deliverable presents the communication handbook, which is basically the set of tools and resources that the partners will leverage along the project to reach stakeholders and the general audience. These include the logo, templates, communication materials (e.g., brochure, newsletter, posters), website and social media. These materials provide a basic set of information about the project and will be regularly updated with scientific results, findings and achievements. It is important to highlight the role of the website since through it the general public will have quick and easy access to relevant information about the project and will be regularly updated with scientific results, findings, and achievements. The information contained on the project website is likely to be valuable even after the project has finished, allowing also higher impacts of the final results of the project. Therefore, R2M aims at ensuring that the website will continue to exist after the project implementation period has finished.

ENSNARE