

Zero waste Heat vessel towards relevant Energy savings also thanks to IT technologies



D 6.1 | ZHENIT Project Website

WP6 – Dissemination, Communication and Exploitation

Version 6.1.4 | September 2022

HORIZON-CL5-2021-D5-01-10

Clean and competitive solutions for all transport modes -
Innovative on-board energy saving solutions



This project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101056801.



Funded by the
European Union

Disclaimer

Funded by the European Union. The content of this deliverable reflects the authors' views. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

Copyright Message

This report, if not confidential, is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0). A copy is available here:

<https://creativecommons.org/licenses/by/4.0/>.

You are free to share (copy and redistribute the material in any medium or format) and adapt (remix, transform, and build upon the material for any purpose, even commercially) under the following terms: (i) attribution (you must give appropriate credit, provide a link to the license, and indicate if changes were made; you may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use); (ii) no additional restrictions (you may not apply legal terms or technological measures that legally restrict others from doing anything the license permits).

Document History

Project Acronym	ZHENIT
Project Title	ZHENIT - Zero waste Heat vessel towards relevant Energy savings also thanks to IT technologies
Project coordination	RINA Consulting
Project duration	42 month – from 1/06/2022 to 30/11/2025
Title	D 6.1 - ZHENIT Project Website
Dissemination Level	Public
Status	Final version for submission
Version	6.1.4
Work Package	WP6
Lead Beneficiary	RINA Consulting
Other Beneficiaries	All
Author(s)	Valentina Parodi (RINA-C), Alessia Peluchetti (RINA-C)

Date	Ver.	Contributers	Comment
01/08/2022	0.1	Valentina Parodi (RINA -C)	First version of the report
07/09/2022	0.2	Alessia Peluchetti (RINA -C)	Review and comments
16/09/2022	0.3	Valentina Parodi (RINA -C)	Final review, document ready to be shared for final check
30/09/2022	0.4	Alessia Peluchetti (RINA -C)	Final draft ready for submission

List of Organizations

Participant Name	Short Name	Country	Logo
1	RINA Consulting Spa	Italy	
1.1	RINA Services Spa	Italy	
2	Ethnicon Metsovion Polytechnion	Greece	
3	Kyma as	Norway	
4	Fundacion tecnalía research & innovation	Spain	
4.1	Universidad del país vasco/ euskal herriko unibertsitatea	Spain	
5	Anonimi naftiliaki eteria kritis (anek) s.a.	Greece	
6	Consiglio nazionale delle ricerche	Italy	
6.1	Consorzio di ricerca per l'innovazione tecnologica, sicilia trasporti navali, commerciali e da diporto scarl	Italy	
7	Sorption technologies gmbh	Germany	
7.1	Sorption technologies srl	Italy	
8	Bound 4 blue sl	Spain	
9	Encontech bv	Netherlands	
10	Gruppo sigla srl	Italy	
11	The university of Birmingham	United kingdom	

Table of Contents

Abbreviation and Acronyms	7
1 Introduction	9
2 Website Characteristics.....	10
2.1 URL, technical details and objectives	10
2.2 Website management tools	10
2.3 Project visual identity.....	10
2.4 Structure	11
2.4.1 Homepage.....	14
2.4.2 Section “The Project – Concept”	16
2.4.3 Section “The Project – Team”	18
2.4.4 Section “Validation”	21
2.4.5 Section “Public Documents”	22
2.4.6 Section “News and Events”	23
2.5 Supplementary information	23
2.5.1 Website’s visits tracking systems.....	23
2.5.2 Updates.....	24
3 Conclusion	25

List of Figures

Figure 2.1: ZHENIT Project Logo	11
Figure 2.2: ZHENIT Website Map.....	12
Figure 2.3: ZHENIT website header	13
Figure 2.4: ZHENIT website footer.....	13
Figure 2.5: Pop-up banner with cookies and privacy policy’s references of the website	13
Figure 2.6: ZHENIT Home page slider and key messages.....	15
Figure 2.7: ZHENIT numbers and progress bar	16
Figure 2.8: ZHENIT newsletter link.....	16
Figure 2.9: Selection of “The Project - Concept” page.....	16
Figure 2.10: “Concept” Introduction banner	17
Figure 2.11: “Concept” schematic panel	17
Figure 2.12: Selection of “The Project - Team” page	18
Figure 2.13: Schematic map of the ZHENIT Consortium members.....	18
Figure 2.14: List of the partners with relative logo and description	20
Figure 2.15: “Validation” section introduction	21
Figure 2.16: “Validation” ZHENIT roadmap	21
Figure 2.17: “Public documents” section.....	22
Figure 2.18: “News and Events” section.....	23
Figure 2.19: an example of Google Analytics interface.....	24

Abbreviation and Acronyms

Acronym	Description
RINA-C	RINA Consulting S.p.A.
WP	Work Package
WH	Waste - Heat
WHR	Waste - Heat Recovery
M	Month
HVAC	Heating, Ventilation and Air Conditioning

Executive Summary

The ZHENIT Project aims to promote Waste Heat Recovery (WHR) as key and “ready-to-implement” solutions to achieve 2030 International Maritime Organisation and European Union targets for shipping sector decarbonization. ZHENIT goal is to fully untap “on-board WH potential” developing and validating WHR solutions at different temperature levels for different on-board services (cooling, power, desalination), in order to valorise heat in different vessel processes.

ZHENIT will strategically define a plan to boost WHR, and energy management onboard, providing clean energy solutions and “low emissions” ship services (e.g. desalinated water, power, on board Heating Ventilation and Air Conditioning systems etc.), with a significant impact already in the short-term.

The present document constitutes the Deliverable D6.1 “ZHENIT Project website”, developed within Work Package (WP) 6, which gives an introduction of the structure of the project website, in its main sections and functions. The website is one of the fundamental tools that will be used during the entire duration of ZHENIT to communicate its objectives and goals, to disseminate the project results and to update news and events. It includes several technical documents and information; it is structured and organized to be easily accessible by a wide range of users, stakeholders, and other interested parties. Together with the social media profiles, the website is another relevant mean of dissemination and communication of the project aiming to achieve a wide audience (as one of the goals of WP6).

1 Introduction

This deliverable was prepared in the framework of Work Package 6, and it is released at the end of September 2022 (M4) as public report to present the design, implementation and release of the ZHENIT website, one of the main communication channels of the project. Together with social media accounts and the newsletter delivery, the website is crucial to present within a unique identity the project to a mixed and non-technical audience, to disseminate the results and to give direct access to the public documents.

The whole ZHENIT external communication strategy is built upon the core concepts of the project:

- Waste Heat Recovery solutions;
- Decarbonisation;
- Low emission;
- Sustainable maritime transportation;
- Energy Management Services;
- ICT monitoring;
- Wingsail;
- Desalinisation.

Actually, the aim of D6.1 is to give an overview of the website characteristics and structure, first, to illustrate the sections and to provide the fundamental tools necessary to monitor the efficacy of the communication strategy adopted.

The present document is divided in chapters, listed as follows:

- Chapter 1: Introduction;
- Chapter 2: Website characteristics;
- Chapter 3: Supplementary information;
- Chapter 4: Conclusion.

The website will be released in October 2022 (M5) by RINA Consulting (RINA-C), and it will be constantly updated. The ZHENIT social media channels were opened in July 2022 (M2), and they are managed by RINA-C during the whole project duration and after the project conclusion.

2 Website Characteristics

2.1 URL, technical details and objectives

The ZHENIT website is accessible on <http://www.zhenit.eu>. The RINA Consulting (RINA-C) as the project coordinator, in charge of managing the website preparation, has registered this URL name and reserved the URL for 5 years. Since all the promotion, communication and dissemination will be centred around the brand name ZHENIT, it was crucial to secure this easy-to-find URL.

The website was set up in static HTML programming language, which makes it responsive.

The ZHENIT website, is designed and maintained by RINA-C, with the following purposes:

- To elucidate capabilities and benefits provided by the ZHENIT strategies to audiences beyond the project's communities, comprising the media and the public, to raise awareness and to achieve societal acceptance, releasing the project's results through all of the website's features;
- To present the ZHENIT Consortium and the role of each partner within the project ambition;
- To giving public access to project's results included in scientific articles, reports, and other relevant dissemination material, to the academic and industrial community;
- To guarantee the exploitation of the results of the project;
- To attract stakeholders (ports, event organizers, industrial manufacturers) potentially interested in creating strategic partnerships and stimulate interaction with the consortium.

2.2 Website management tools

The site is developed in HTML static programming language in collaboration with JavaScript on Azure Static Web App. It is fully responsive and adapts to all screen analyses of any device.

2.3 Project visual identity

A common project logo has been designed by RINA-C according to the consortium approval to allow a unique public image/branding for the project. The logo allows the public to identify easily ZHENIT thus

ensuring visibility and recognition. For this reason, it is fundamental to include the project logo on the website in all the sections and banner to make ZHENIT clearly visible by, for example, repeating it in the upper banner of every pages. ZHENIT adopts a captivating project logo as a common project and graphical visual identity to attract external users and increase interest on the website's content (Figure 2.1).



Figure 2.1: ZHENIT Project Logo

The logo well represents the project by reporting a navigating vessel which is producing vapor. The colours of the logo, thus red and blue, give an idea of the temperature directly linked to the WHR solutions developed to reach the goals of ZHENIT. Actually, by maximizing the WHR, the vessels may reduce the emissions making the maritime transport more environmentally sustainable.

2.4 Structure

ZHENIT website has been designed with the following structure, by creating specific sections to facilitate the navigation (Figure 2.2).

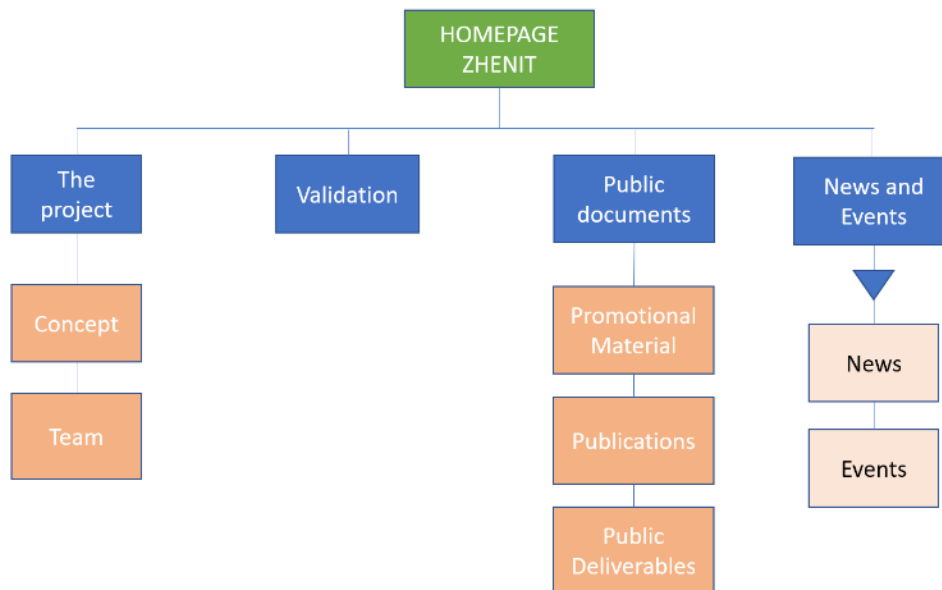


Figure 2.2: ZHENIT Website Map

- “The Project”:
 - “Concept” section gives an overview of the project innovations and technical developments;
 - “Team” presents who are the players involved in the project developments.
- “Validation”:
 - Section that simplifies the ZHENIT project innovations during the validation campaign.
- “Public Documents”:
 - Divided in multiple subsections to organize the public documents which will be realised during the project lifetime, comprising also the updated promotional material, publications and official reports.
- “News and Events”:
 - Section that will collect separately the most relevant news and past/future events of the ZHENIT project.

In Figure 2.3, the ZHENIT website header is presented. In this upper bar, the project’s logo appears on the left and the links to the sections are on the right side.

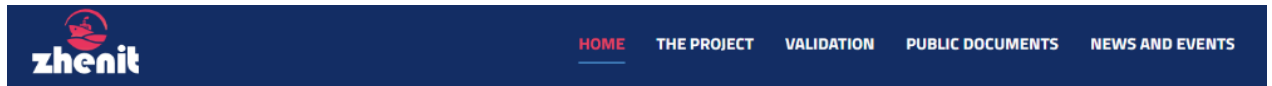


Figure 2.3: ZHENIT website header

In Figure 2.4, the website footer is reported with all the references that are fundamentals for the funded project to be compliant with art.17 and annex 5 of the grant agreement, i.e., “communication, dissemination and visibility”, showing the European flag and the acknowledgement. Furthermore, within this part, the direct link to the ZHENIT social media, Twitter and LinkedIn, is present, as well as the “newsletter” and “contact” buttons. Here, the viewer has the possibility to explore the website privacy policy, cookie policy and the disclaimer containing the terms of use.

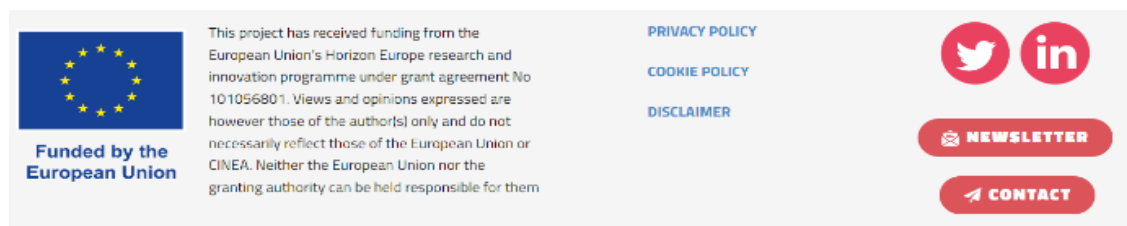


Figure 2.4: ZHENIT website footer

In Figure 2.5, it is reported the automatic pop-up banner to inform the user that the website use cookies and to access directly to the cookies and privacy policy of the website (direct link to the policies pages).

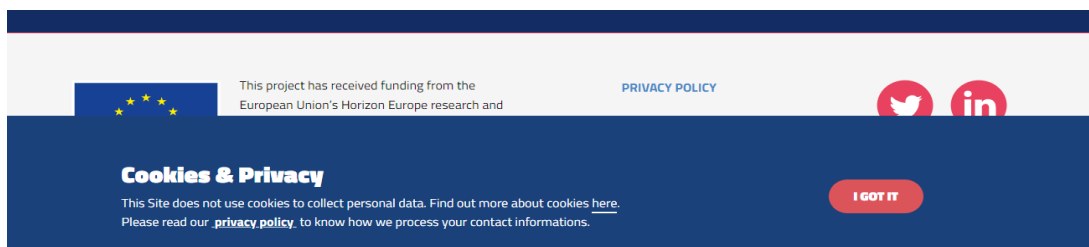


Figure 2.5: Pop-up banner with cookies and privacy policy’s references of the website

In the following paragraphs a detailed analysis of each website section is presented, starting from the “Home” page.

2.4.1 Homepage

The home page of the ZHENIT website provides a summary of the project’s key objectives, concept and vision and serves as the entry point for users. The primary purpose of the home page is to provide the basic information around the project to let the users get a quick grasp of what the project is about and become attracted to navigate through the rest of the sections to learn more about the project.

Three key messages have been reported:

- Decarbonisation of the maritime transport via waste heat recovery;
- ZHENIT straight forward to boost zero waste heat solutions by coupling it with innovative ICT monitoring;
- Energy Management solutions, thermal energy storage and a hybrid propulsion system will be developed to reduce pollutants in harbour area and in open sea.

All of them, as shown in Figure 2.6, are presented using appealing images to attract immediately the visitors and keep them engaged with ZHENIT website. The homepage will soon be enriched through a promotional video, such as one-minute long animations, showing the main concept of ZHENIT.

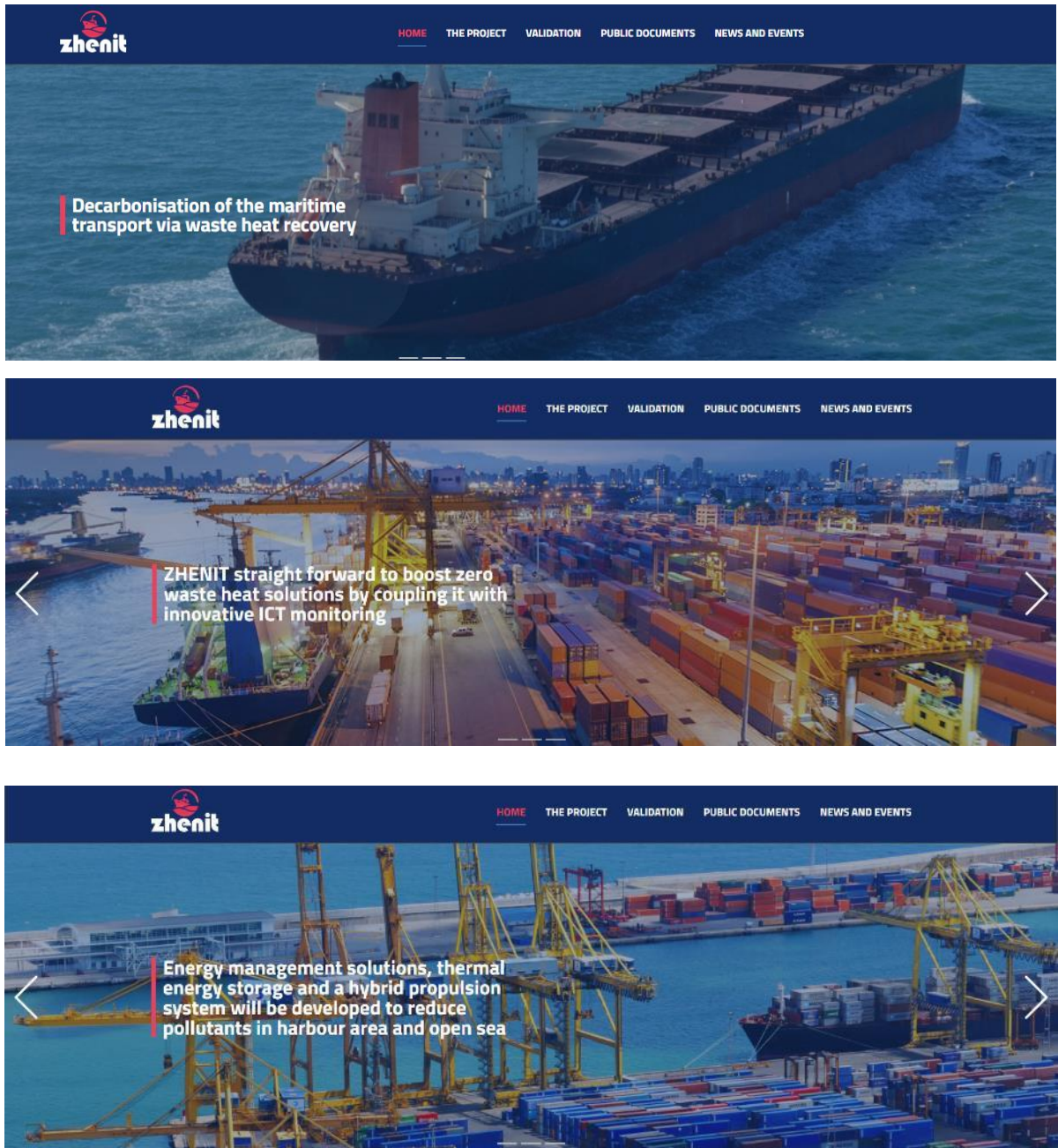


Figure 2.6: ZHENIT Home page slider and key messages

During the navigation through the homepage a synthesis of the main project data can be viewed, thanks to the explicative boxes that easily attract the users' attention, followed by a progress bar with the representation of the time evolution of the project, currently at M4 (Figure 2.7).

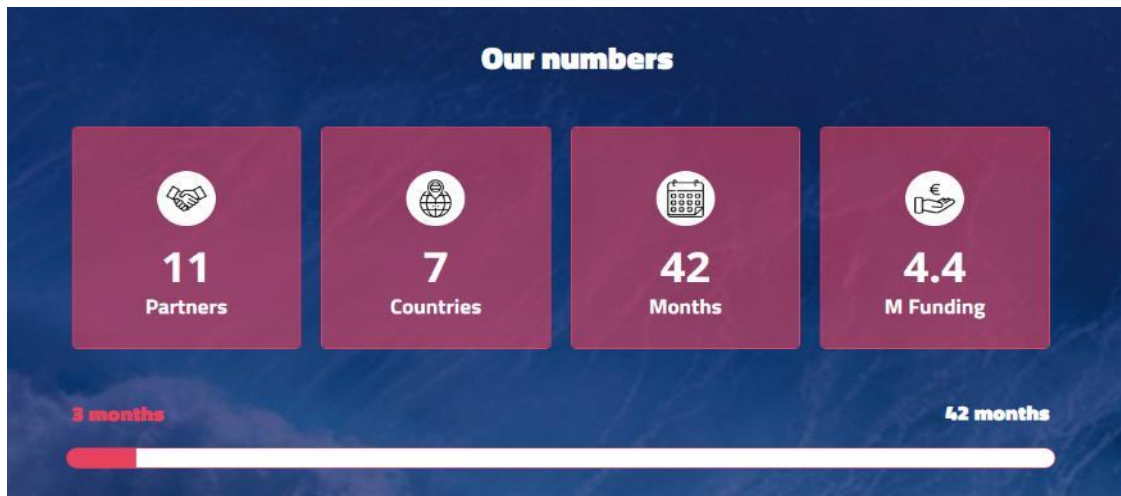


Figure 2.7: ZHENIT numbers and progress bar

Moreover, within the home page it is possible to directly request to subscribe to the project newsletter (Figure 2.8). By clicking the button “Subscribe” a direct mail with a request can be sent to the ZHENIT newsletter mailbox.



Figure 2.8: ZHENIT newsletter link

2.4.2 Section “The Project – Concept”

To access to “The Project”, the user can visit the “Concept” section or select the “Team” page as these have been distinguished.



Figure 2.9: Selection of “The Project - Concept” page

Considering the “Concept” page, a short introduction to the section is presented to help the user to understand the technical aspect of the innovations adopted during the project development (Figure 2.10).

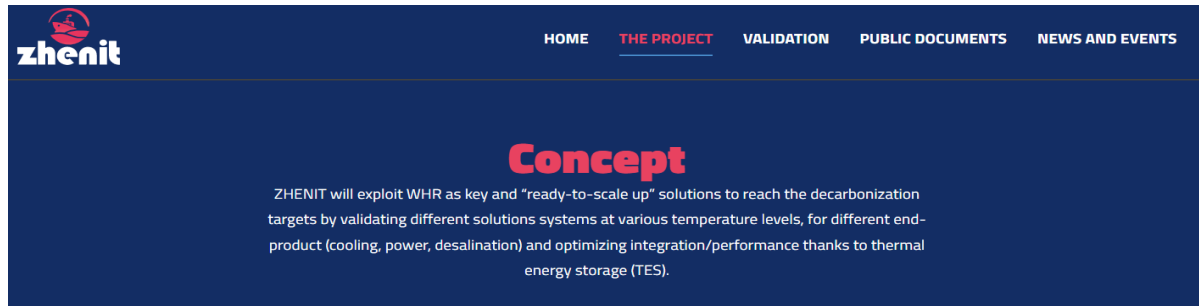


Figure 2.10: “Concept” Introduction banner

Following the introductory text, a descriptive and schematic panel has been included to identify the main technologies that will be developed during the project evolution, as clearly visible in Figure 2.11.

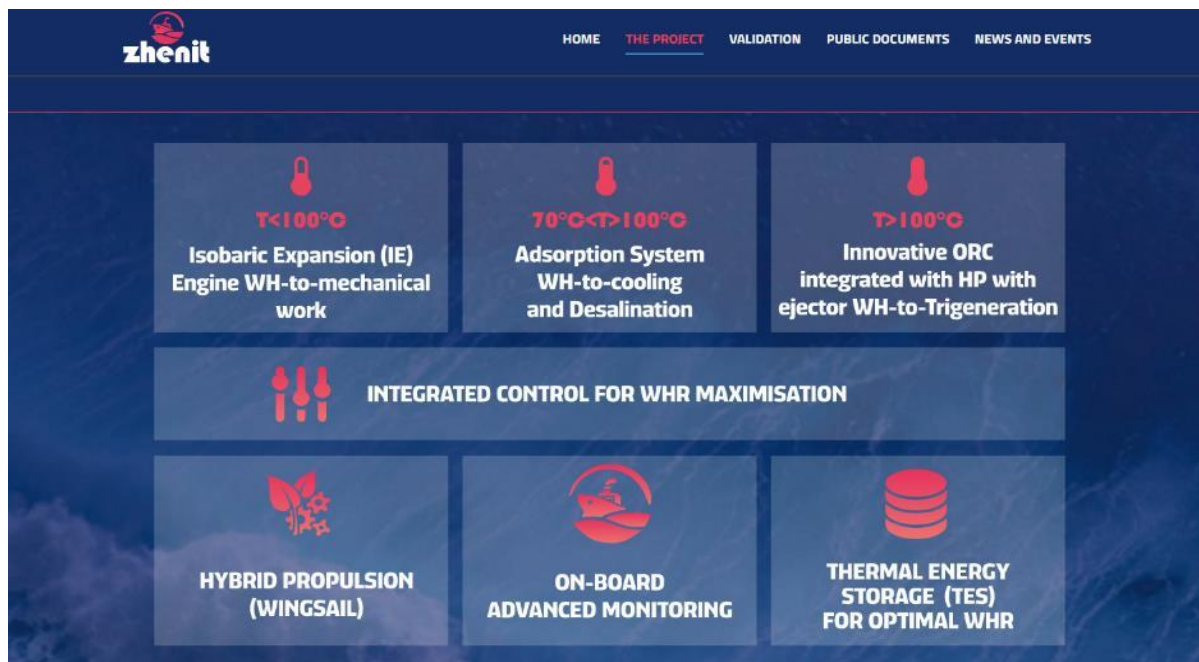


Figure 2.11: “Concept” schematic panel

2.4.3 Section “The Project – Team”

To access the section “Team”, as visible in Figure 2.12, the user must move to “The Project” button and select the second option.

In this section, it is visible as first instance, the map with the geographical distribution of all the ZHENIT Consortium members, with their relative logo (Figure 2.13).

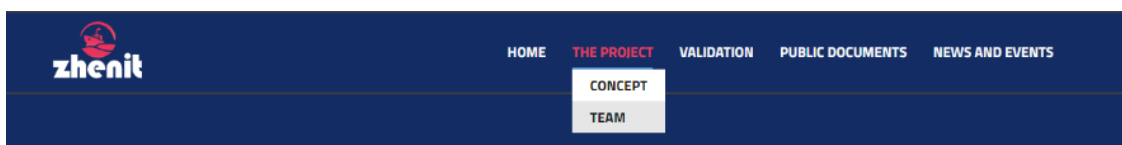


Figure 2.12: Selection of “The Project - Team” page



Figure 2.13: Schematic map of the ZHENIT Consortium members

Scrolling the page, a short description of each partner is reported including a “partner profile” displayed for each member of the consortium, with the following information: logo linked directly to the partner’s website, short description of the organisation and relative role in the project (Figure 2.14).



RINA CONSULTING

RINA provides a wide range of services across the Energy&Mobility, Marine, Certification, Infrastructure & Real Estate and Industry sectors. With net revenues in 2021 of 533 million Euros, over 4,400 employees and 200 offices in 70 countries worldwide, RINA is a member of key international organizations and an important contributor to the development of new legislative standards. RINA Consulting is the administrative and financial coordinator of the project and it is in charge of taking care about Communication & Dissemination actions along the whole project duration. Furthermore, thanks to the contribution of RINA Services the studies on regulatory aspects will be performed. RINA is also responsible for the results exploitation.

NTUA

The National Technical University of Athens (NTUA) is the oldest and most prestigious technological educational institution in Greece and has contributed unceasingly to the country’s scientific, technical & economic development since its foundation in 1836. NTUA is divided into nine academic Schools, eight engaging in engineering sciences and one in general sciences. The Laboratory of Steam Boilers and Thermal Plants (LSBTPI) and Laboratory of Thermal Processes (LTP) belong to the Thermal Engineering Department of the School of Mechanical Engineering. The laboratories have wide experience and are active for over 30 years in the field of thermal energy conversion technologies, focusing among other topics on energy efficiency assessment and evaluation, energy savings in industrial processes and power plants, process simulation/optimisation and development and experimental testing of small-scale heat pump units, Organic Rankine Cycle (ORC) systems and cooling cycles for multigeneration. In ZHENIT, NTUA is responsible for the development of an innovative cascade ORC – ejector integrated heat pump for the utilization of waste heat recovery at two temperature levels (130–150°C) and *60°C for the production of electrical power, heating and cooling. Furthermore, NTUA coordinates activities related to dynamic simulation/control and monitoring of the ZHENIT solutions, being primarily responsible for their dynamic modelling.



KYMA

Kyma AS is a specialist in the field of manufacturing and development of products for marine performance monitoring. Kyma delivers high quality products for performance monitoring to all types of vessels. Our products represent state of the art technology, and quality assurance is a continuous and necessary process for efficient production and development of new products. Kyma takes care about the development of the monitoring platform for La Naumon and of the WHR solutions. Furthermore, it complies with the on-board waste heat monitoring from the present engines.

TECNALIA

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute inure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute inure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.



ANEK LINES

ANEK LINES is activated for more than a half of a century in the passenger shipping sector, performing itineraries in the Aegean and the Adriatic seas. Group’s fleet consists of 8 vessels offering high quality services both at Greek domestic routes as well as at the routes connecting Greece with Italy. ANEK is involved in ZHENIT project as an end-user, representing and identifying Ro-Pax vessels’ specifications, characteristics and requirements, under the scope of the potential adaptation of the project’s solutions and outcomes aiming at reducing vessels’ primary energy need towards the ambitious goal of zero-WH vessels in the passenger shipping sector.

CNR ITAE

The Institute for Advanced Energy Technologies (CNR ITAE) was established by the Italian National Council of Research and has long proven experience in the development and penetration of technologies related to energy saving, low polluting energy production, renewable energy sources, hydrogen and fuel cells in Italy and Europe since the 80’s. CNR ITAE will be in charge for the development and testing of the adsorption cooling + desalination unit. Furthermore, it will focus on the modelling activity, KPIs definition and support to the validation campaign.



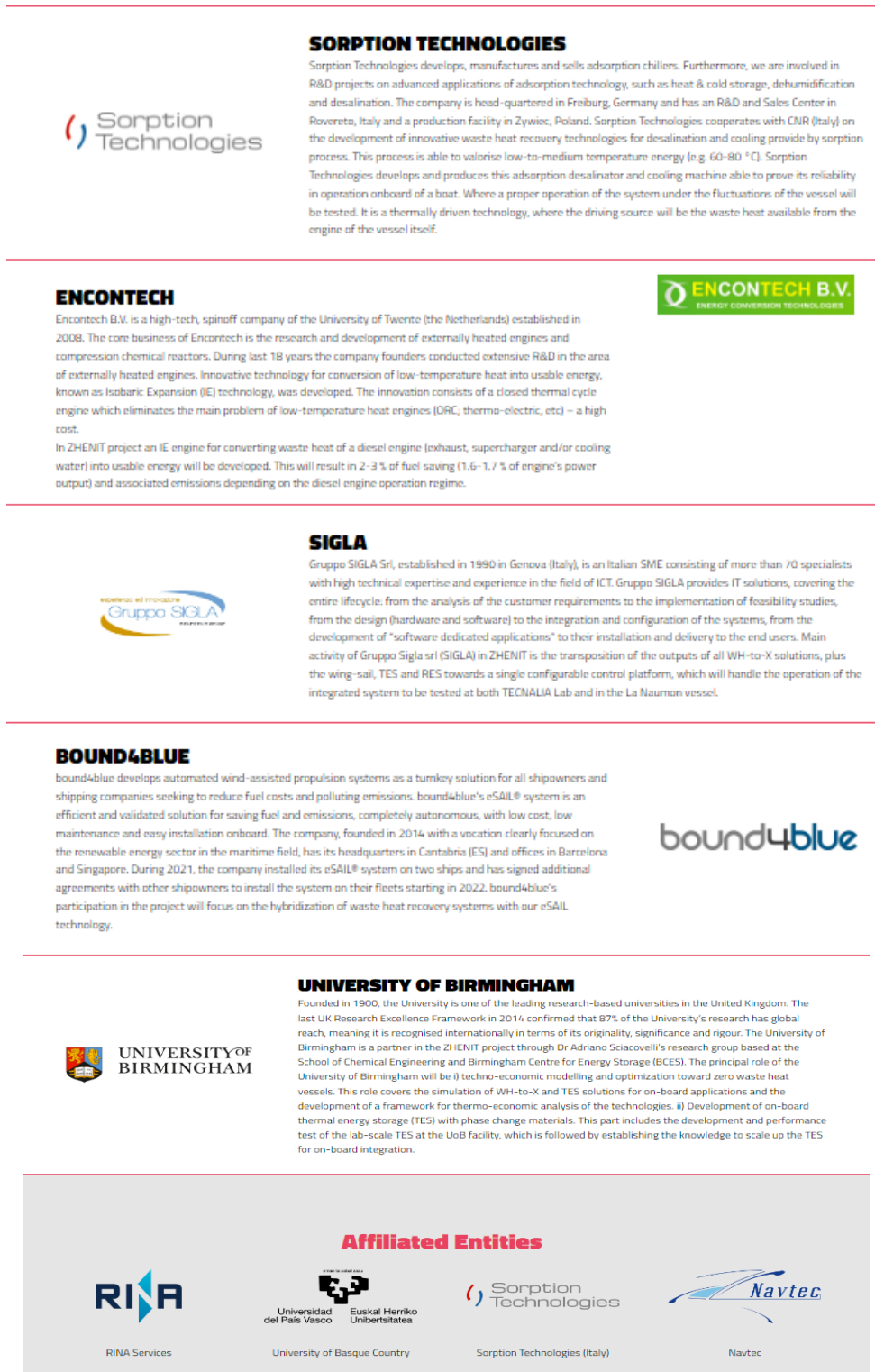


Figure 2.14: List of the partners with relative logo and description

2.4.4 Section “Validation”

By moving to the “Validation” page, it is clearly visible the short description of the page like in Figure 2.15. this sub-page the structure of the ZHENIT workplan reported and visualized with an infographic.

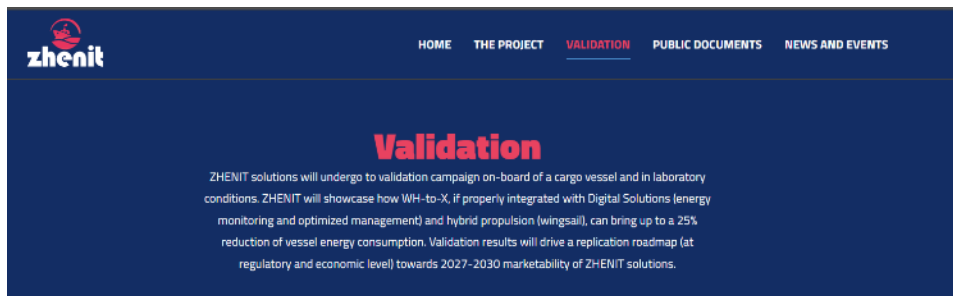


Figure 2.15: “Validation” section introduction

By scrolling down the page, an infographic representing the planned roadmap of the ZHENIT project is report to guide the user throughout the project developmental aspects (Figure 2.16).



Figure 2.16: “Validation” ZHENIT roadmap

2.4.5 Section “Public Documents”

The section “Public Documents” has been included in order to support the user to deepen the knowledge of the project. Actually, in this page it is possible to download the ZHENIT public material (Figure 2.17). The section includes the following sub-sections:

- Promotional Material: in this block all the promotional materials (e.g., brochure, poster, public presentation, and video, etc.) will be shared and made available for downloading;
- Publications: in this block all the scientific publications released by the consortium’s partners will be shared and the related files will be available for the download every time they will be approved and available;
- Public Deliverables: in this block all the public deliverables and reports of the ZHENIT project will be uploaded after the approval from the EC and the related files will be available for the download.

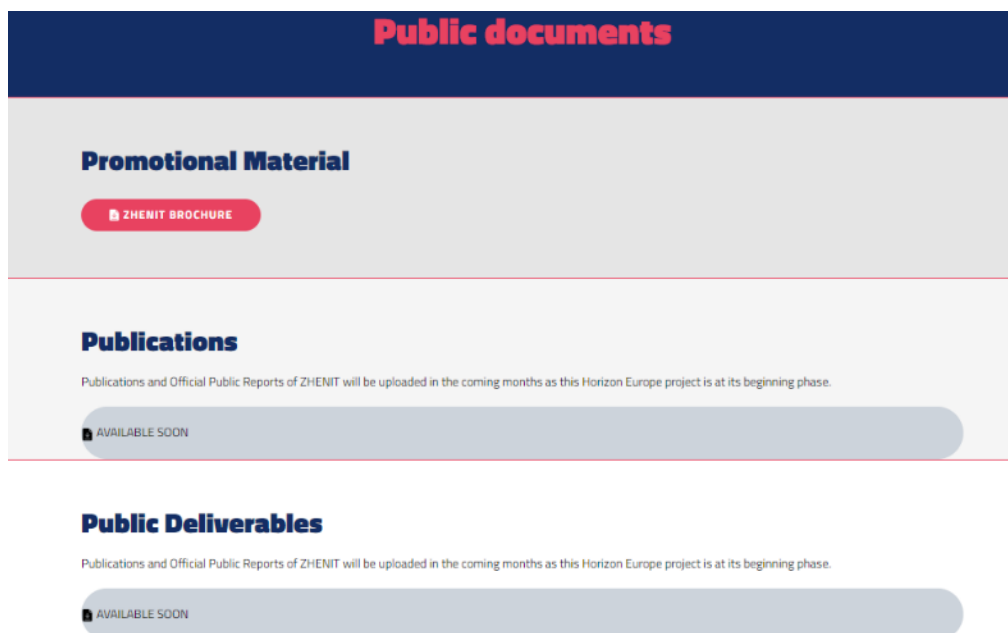


Figure 2.17: “Public documents” section

2.4.6 Section “News and Events”

The section “News and Events” has been included to share directly with the ZHENIT audience and visitors the information regarding the latest news (e.g. press releases from partners, interviews and articles in magazines and journals, etc.) and events, both internal (e.g. consortium meetings, working groups meetings, etc.) and external (e.g. dissemination events, stakeholders workshop webinars, learning programme, etc.). The news can be distinguished with respect to the events blocks, thanks to an identification label on the top of each box and to a different colour code: news is tagged in red, while the events appear in light blue.

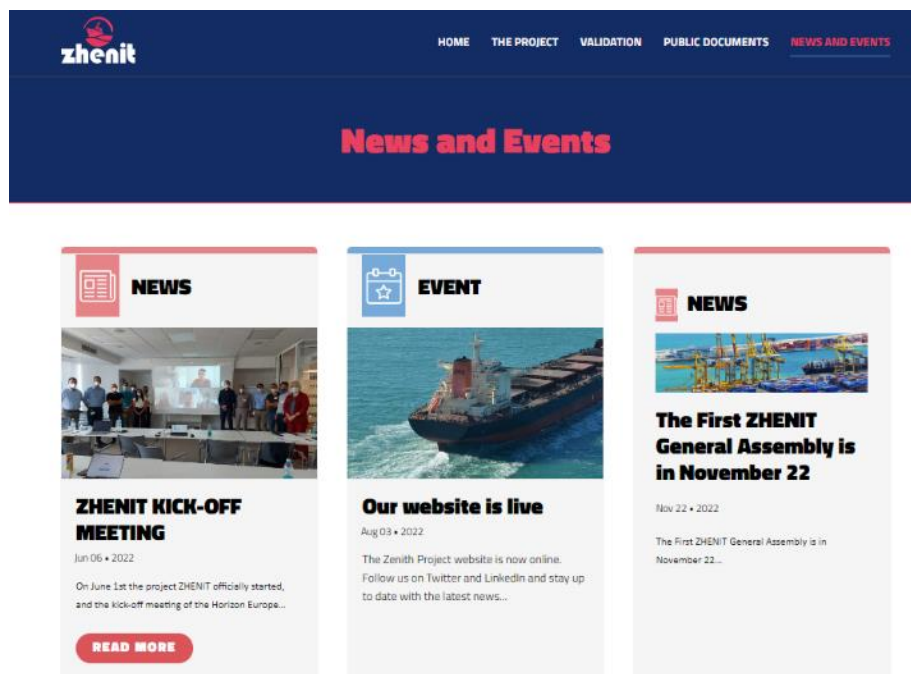


Figure 2.18: “News and Events” section

2.5 Supplementary information

2.5.1 Website’s visits tracking systems

One of the most important aspects while managing a project website, or a website in general, is the tracking of the visits to have a clear view of the communication and digital marketing strategy adopted. As the actual situation that is affecting the European country in terms of legal advocacy of Google Inc. to treat the personal data while tracking the users’ visits through Google Analytics tool, we are still

evaluating the best option for that purpose (<https://www.garanteprivacy.it/home/docweb/-/docweb-display/docweb/9782874>).

Google Analytics in its latest version (v4) can be freely used to track the traffic and user behaviours. Data collected, processed and stored by Google Analytics ("Google Analytics data") are several: location, demographics, language, device, user behaviour, etc (Figure 2.19).

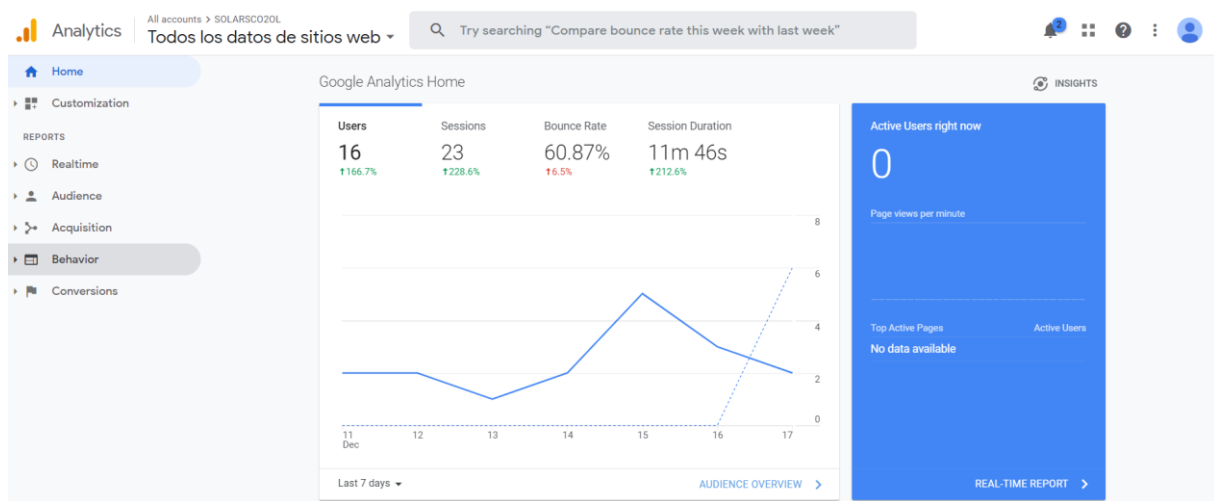


Figure 2.19: an example of Google Analytics interface

According to Google, data should be kept confidential and anonymized, however this is still under legal inspection.

To solve this issue, there is still the possibility to install a tracking tool which stores the anonymized data in Europe and that is compliant with our national privacy authority. This system is "*Matomo*", which offers several additional analyses by paying an annual charge. During the coming months, the consortium will go through the situation to find which solution is the most safe and compliant for the ZHENIT visitors.

2.5.2 Updates

The ZHENIT Project website will be updated regularly to reflect the current state of the project's progress. The website will continue to be updated for the entire duration of the project as well as at least two years after its completion.

3 Conclusion

The ZHENIT website, with its structure, content and graphic design, constitutes the basis for an impactful website that attracts many users and will be the main communication channel for the project duration.

The website is effectively connected to all the other social media accounts of the project to guarantee an interactive and fruitful project communication. RINA-C will regularly update the pages of the website knowing its structure and how it has been developed, upload relevant material and publish new items (such as news and public deliverables) as well as external events and project events.

The communication strategy developed by RINA-C envisions a continuous monitoring of the website traffic and evaluation of the stakeholders' engagement, to ensure a maximum outreach potential for the project communication and dissemination.



RINA Consulting

