



RINNO PROJECT

Report

**Transforming energy efficiency in
European building stock through
technology-enabled deep energy
renovation**

**Deliverable 8.5:
Report on RINNO Project Website &
Dissemination Material (Final Version)**

**Work Package 8: Dissemination, Exploitation,
Promotion & Knowledge Transfer**

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Executive Summary

This deliverable provides a detailed update on the status of the RINNO project website at <https://rinno-h2020.eu/> and dissemination material initially designed for the project at M3 and subsequently updated in Y2. The RINNO website acts as a central repository for the latest news, deliverables, presentations, and other dissemination material related to the project.

The document is structured as follows. Following an introduction, Section 2 describes the overall website structure and content of each specific page. Section 3 describes the GDPR cookie consent solution implemented on the website. Usability considerations, such as pages style, layouts and browser compatibility, and page load speed are reported in Section 4. Section 5 discusses the measurement analytics tools implemented since M3. Section 6 discusses search engine optimization. Section 7 presents other preliminary dissemination material that has been created to maximise the visibility of the project and engagement with different stakeholders since M3. Section 8 presents and update on the social media channels to promote the project and disseminate the associated research outputs. The document closes with a brief summary of the information reported in the deliverable.

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List of Abbreviations

CMS	Content Management System
CTA	Call to action
CRM	Customer Relationship Management
DA	Domain Authority
DCU	Dublin City University
EAB	External Advisory Board
EC	Executive Committee
M1	June 2020
M3	August 2020
M12	June 2021
M23	April 2022
M24	May 2022
SEO	Search Engine Optimisation
UI	User Interface
UX	User Experience
WP8	Work Package 8
Y1	Year 1
Y2	Year 2
Y3	Year 3
Y4	Year 4

1 Introduction

The RINNO website at <https://rinno-h2020.eu/> has been live since June 2020 (M1). The website is a part of the exploitation, dissemination and concertation strategy of the project and is a formal deliverable of WP8. It serves as the main source of information regarding activities, news, and public project results. It is also the central point of contact and interaction for stakeholders external to the project consortium.

The website described in this document is an updated version of the one that was initially presented in D8.4. A full review and re-design of the website was undertaken in Y2 in order to better communicate the advancements of the project, and to maintain and optimise the website in the context of dynamic and emerging web technologies, web design, and UI/UX standards. This document presents the latest version of the RINNO website and other dissemination material.

2 Website Structure and Content

The website was built using the WordPress CMS system. WordPress is widely used and as such has a large user community. The WordPress interface is intuitive and easy to use without having any knowledge of web programming.

A number of plugins were installed to enhance the functionality of the website upon its launch. For example, a Downloads plugin is used to track the number of downloads for each deliverable, while GDPR-compliant contact form functionality (used in combination with Mailchimp) captures the email addresses of website visitors. Nitropack is installed to improve the website load speed and user experience. Finally, Yoast SEO is utilised to optimize the website pages for search engines.

The website has 25 inner pages¹ which are described in more detail in Sections 2.1 and 2.2. The website deliverable will continue to evolve as project progresses and deliverables are released.

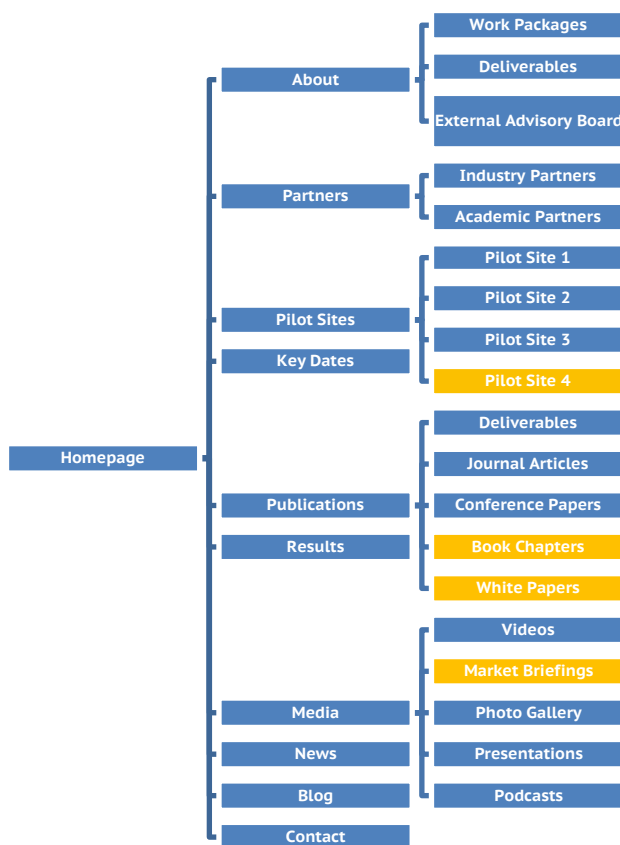


Figure 1 Website Navigation

2.1. Homepage

The RINNO homepage was subject to a major re-design following extensive user feedback and usability testing. The overall objective of the re-design was to communicate more clearly

¹ Pages that are currently offline are shown in orange. These will be made public as soon as different publications related the project are released.

what the project aims to achieve and to make more recent updates more prominent and therefore more accessible. In addition, we also revised the navigation bar to add clearer options and improve usability. The revised navigation bar now includes the following items: Home, About, Partners, Pilot Sites, Milestones, Publications, Media, News, Blog, and Contact. Figure 2 below shows the revised navigation bar and homepage header. Changes are to the header were in line with users’ feedback to add more colour to the website.

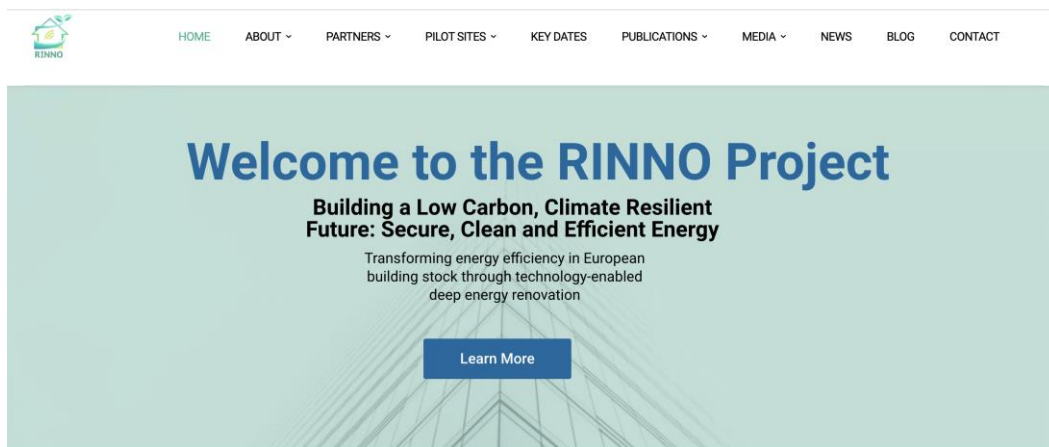


Figure 2 Homepage Slider

In order to increase the visibility of more recent project updates, the revised homepage now features a ‘Discover the RINNO Project’ section which presents the project’s latest blog posts, press releases, media mentions and case studies. This section is presented directly below the homepage header to improve user click-through rates and is shown in Figure 3.

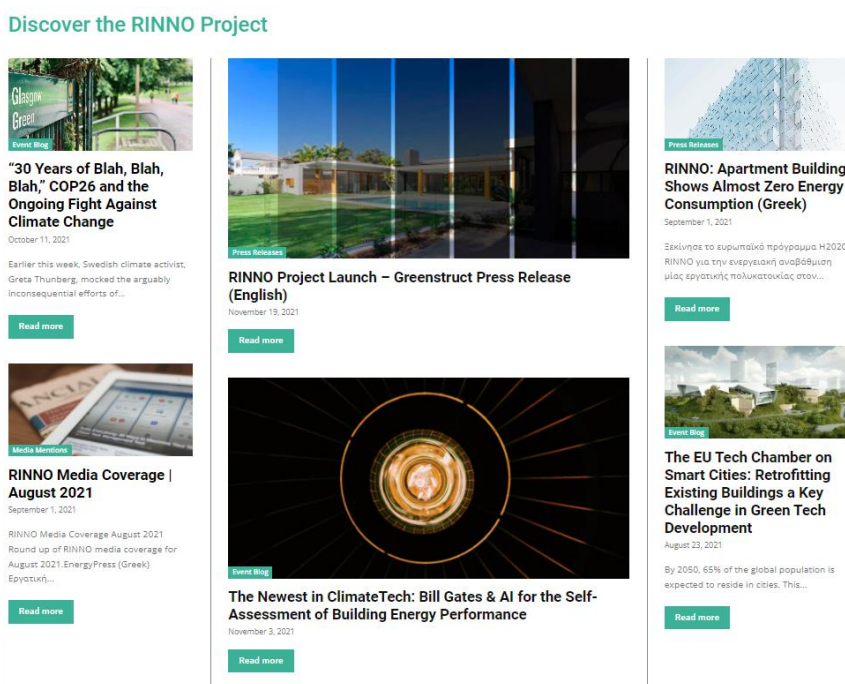


Figure 3 Discover the RINNO Project

An inline opt-in form encourages website visitors to sign up for the quarterly project newsletter. This section of the homepage has been moved closer to the top of the page and presents a clearer message than before as shown in Figure 4.



Figure 4 Inline Opt-In Form

A short description of the project's pilot sites provides access to some initial information for prospective stakeholders. The brief outline for each pilot site was revised to ensure consistency in length and the flags of the respective countries were added to better communicate their location. Figure 5 presents the new pilot site section of the homepage.

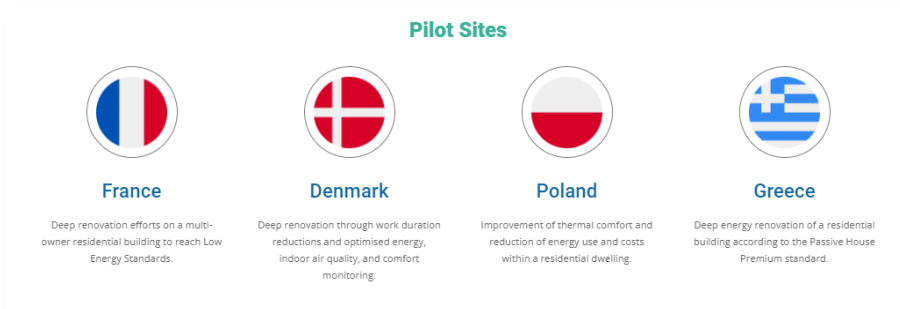


Figure 5 Pilot Sites

The Project at a Glance section provides some high-level figures regarding the project, namely the number of partners, pilot sites, deliverables, and work packages. This section was moved closer to the top of the homepage to increase visibility and is shown in Figure 6.

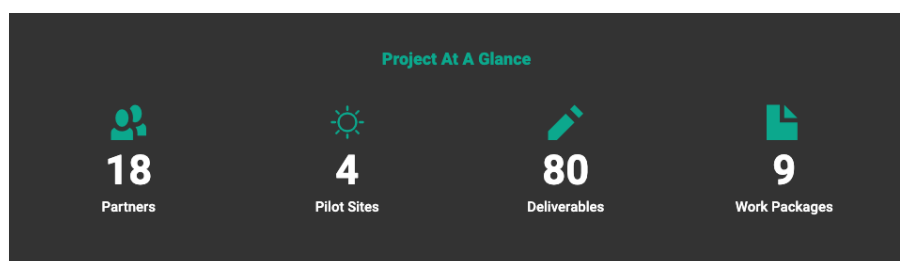




Figure 6 Project at a Glance

The promotional section now features public deliverables; additional project materials (e.g., briefings) will be added as they become available. The updated section is shown in Figure 7.


Public Deliverables



Deliverable 1.6: Report on RINNO KPIs (v1)
Work Package 1: RINNO Augmented Intelligence Renovation Framework.



Deliverable 1.4: RINNO Pilot Analysis and Deployment Plan
Work Package 1: RINNO Augmented Intelligence Renovation Framework.



Deliverable 8.1: Report on RINNO Dissemination & Communication Plan
Work Package 8: Dissemination, Exploitation, Promotion & Knowledge Transfer.

[Learn More](#)

Figure 7 Promotional Section

The Partners section presents the logos of the 18 RINNO partners: 13 industrial partners and 5 academic and research partners. Each logo is hyperlinked to a dedicated partner page and are now presented with colours following users' feedback. The revised Partners section is presented in Figure 8.

RINNO Partners



Figure 8 Partners Section

Finally, the homepage footer consists of six main elements: (1) a brief description of the project, (2) shortcuts to some important pages of the website, (3) a map locating RINNO partners, (4) a form where users can subscribe to the project mailing list, (5) a Horizon2020 acknowledgement, and (6) quick links to the RINNO social media profiles on Facebook, Twitter, YouTube, and LinkedIn. The revised design is presented in Figure 9 and shows more visible section titles and social media logos and, once again, incorporates more colourful elements. A comparison between the two versions is shown in Figure 9.

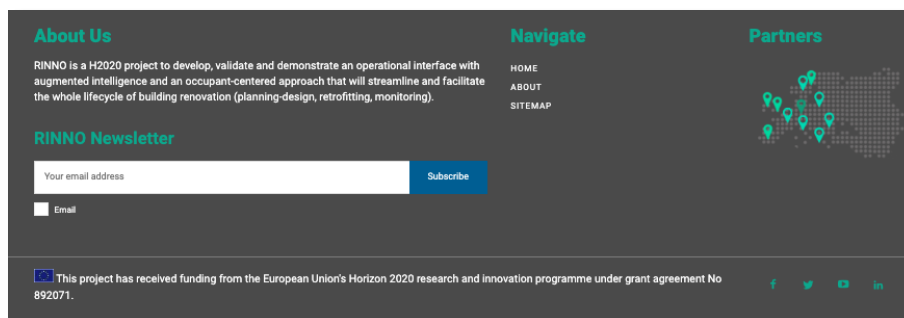


Figure 9 Homepage Footer

2.2. Inner Pages

This section presents the inner pages of the revised RINNO website. Following the migration to a new WordPress theme, the design of these pages was reviewed and adapted, where necessary.

2.2.1 About the Project

The About the Project page (see Figure 10) describes the project and its base assumptions. It also outlines the project objectives, contributions and expected impact.

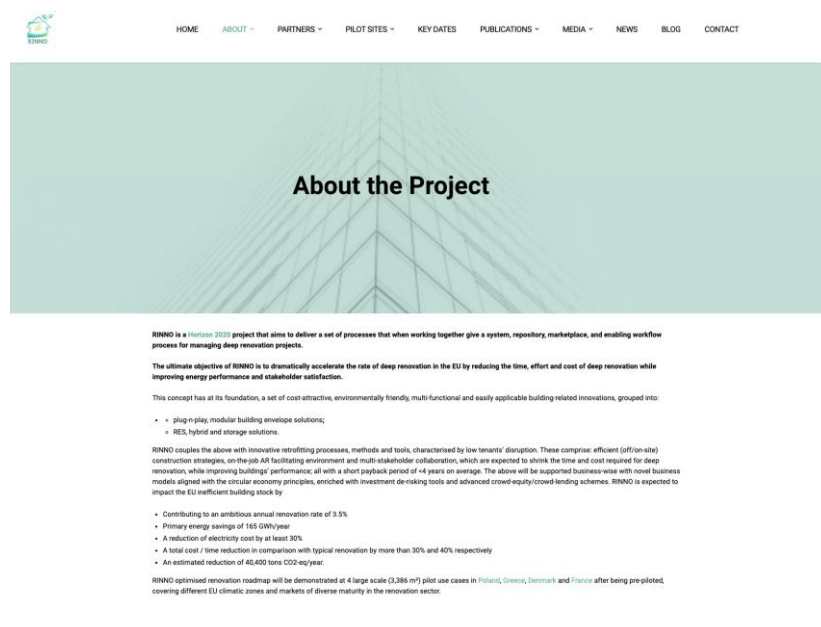
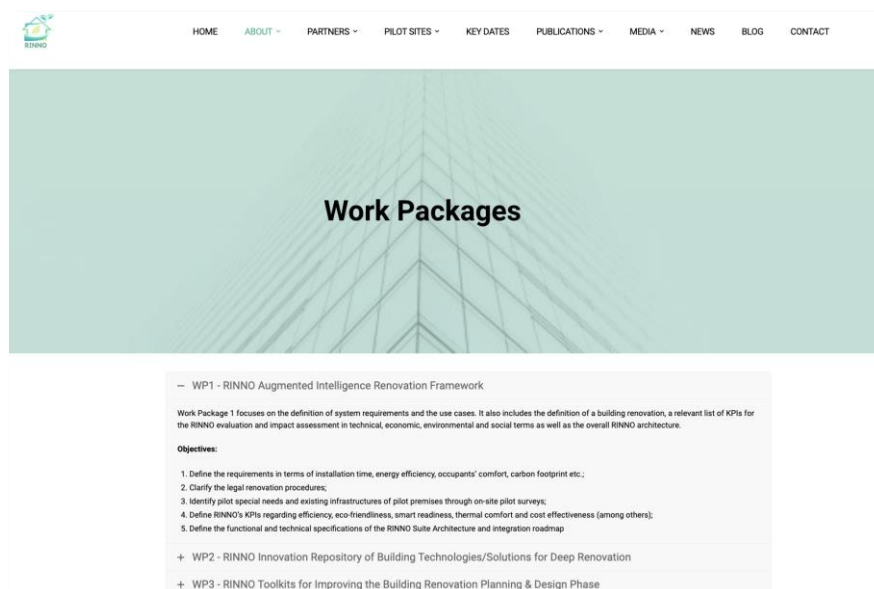


Figure 10. About the Project Page

2.2.2 Work Packages

Work Package descriptions and objectives are discussed on the Work Packages page (see Figure 11). These reflect the work packages as per the consortium agreement. Further detail is accessible by means of a toggle menu that expands once the user clicks the desired work package title.



HOME ABOUT PARTNERS PILOT SITES KEY DATES PUBLICATIONS MEDIA NEWS BLOG CONTACT

Work Packages

– WP1 - RINNO Augmented Intelligence Renovation Framework

Work Package 1 focuses on the definition of system requirements and the use cases. It also includes the definition of a building renovation, a relevant list of KPIs for the RINNO evaluation and impact assessment in technical, economic, environmental and social terms as well as the overall RINNO architecture.

Objectives:

1. Define the requirements in terms of installation time, energy efficiency, occupants' comfort, carbon footprint etc.;
2. Clarify the legal renovation procedures;
3. Identify pilot special needs and existing infrastructures of pilot premises through on-site pilot surveys;
4. Define RINNO's KPIs regarding efficiency, eco-friendliness, smart readiness, thermal comfort and cost effectiveness (among others);
5. Define the functional and technical specifications of the RINNO Suite Architecture and integration roadmap

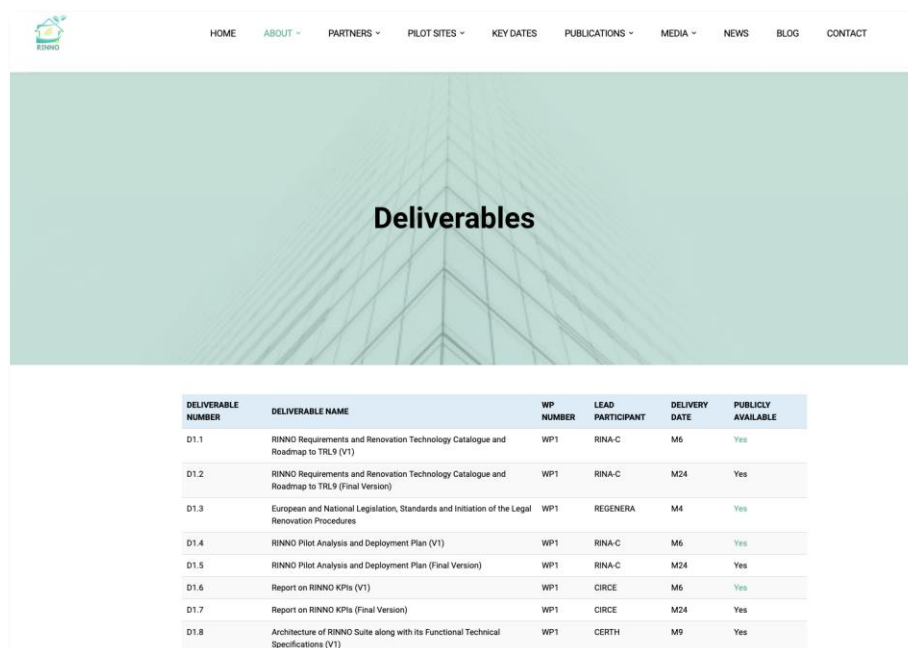
+ WP2 - RINNO Innovation Repository of Building Technologies/Solutions for Deep Renovation

+ WP3 - RINNO Toolkits for Improving the Building Renovation Planning & Design Phase

Figure 11 Work Packages Page

2.2.3 Deliverables

All RINNO deliverables are listed on the dedicated Deliverables web page (see Figure 12). The table on the page specifies the number and name of each deliverable, the corresponding work package, lead partner and delivery date, and whether it will be publicly available or not. As deliverables are accepted by the EC, these will be made available for download via a hyperlink (see, for example, D1.1 in Figure 12).



HOME ABOUT PARTNERS PILOT SITES KEY DATES PUBLICATIONS MEDIA NEWS BLOG CONTACT

Deliverables

DELIVERABLE NUMBER	DELIVERABLE NAME	WP NUMBER	LEAD PARTICIPANT	DELIVERY DATE	PUBLICLY AVAILABLE
D1.1	RINNO Requirements and Renovation Technology Catalogue and Roadmap to TRL9 (V1)	WP1	RINA-C	M6	Yes
D1.2	RINNO Requirements and Renovation Technology Catalogue and Roadmap to TRL9 (Final Version)	WP1	RINA-C	M24	Yes
D1.3	European and National Legislation, Standards and Initiation of the Legal Renovation Procedures	WP1	REGENERA	M4	Yes
D1.4	RINNO Pilot Analysis and Deployment Plan (V1)	WP1	RINA-C	M6	Yes
D1.5	RINNO Pilot Analysis and Deployment Plan (Final Version)	WP1	RINA-C	M24	Yes
D1.6	Report on RINNO KPIs (V1)	WP1	CIRCE	M6	Yes
D1.7	Report on RINNO KPIs (Final Version)	WP1	CIRCE	M24	Yes
D1.8	Architecture of RINNO Suite along with its Functional Technical Specifications (V1)	WP1	CERTH	M9	Yes

Figure 12. Deliverables Page

2.2.4 External Advisory Board

The External Advisory Board page (Figure 13) presents the list of the EAB members, their picture, and short bio. All images are hyperlinked to the institutional or LinkedIn profile of the corresponding member.

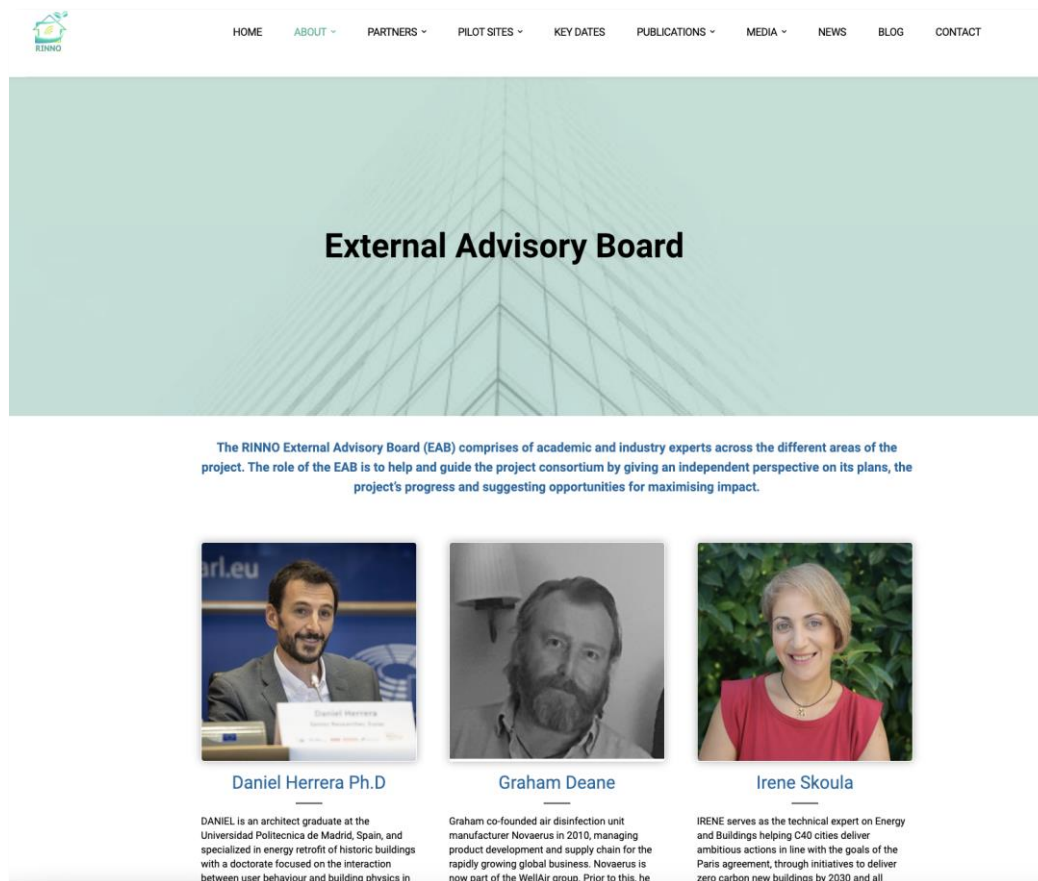


Figure 13. External Advisory Board Page

2.2.5 Partners

The content of the RINNO Partners page (see Figure 14) contains the 18 logos of the RINNO partners. Individual partner pages provide information on the partner, their role in the project and key personnel involved in RINNO. Figure 15 presents an exemplar partner page.

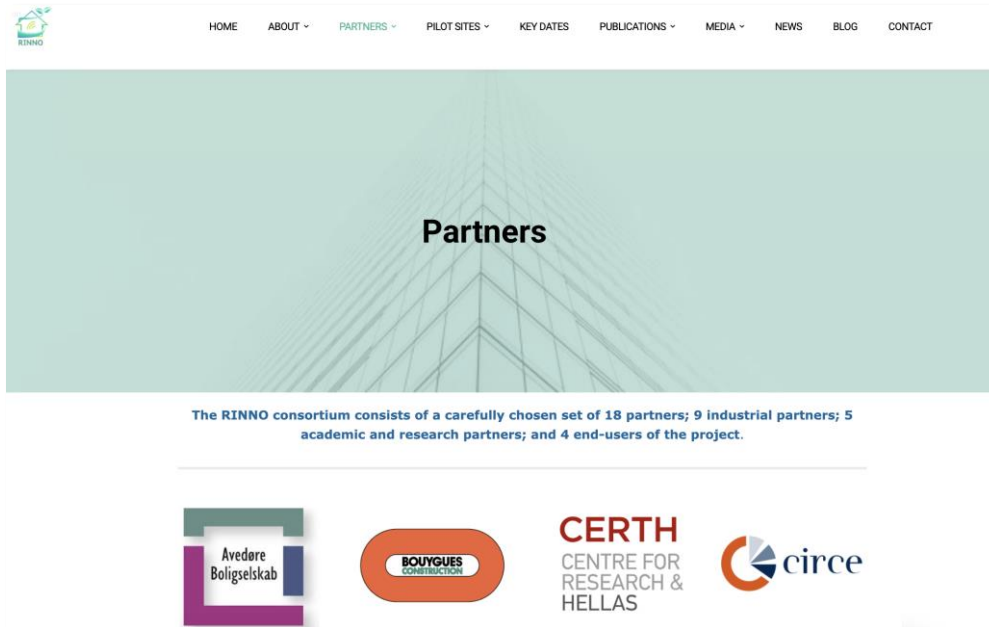


Figure 14. Partners

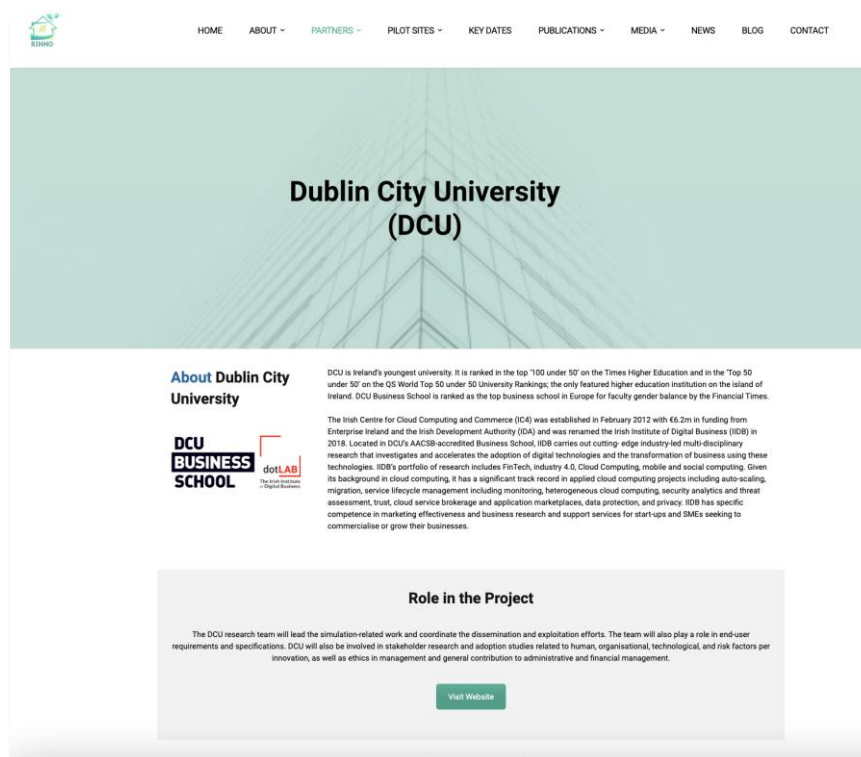
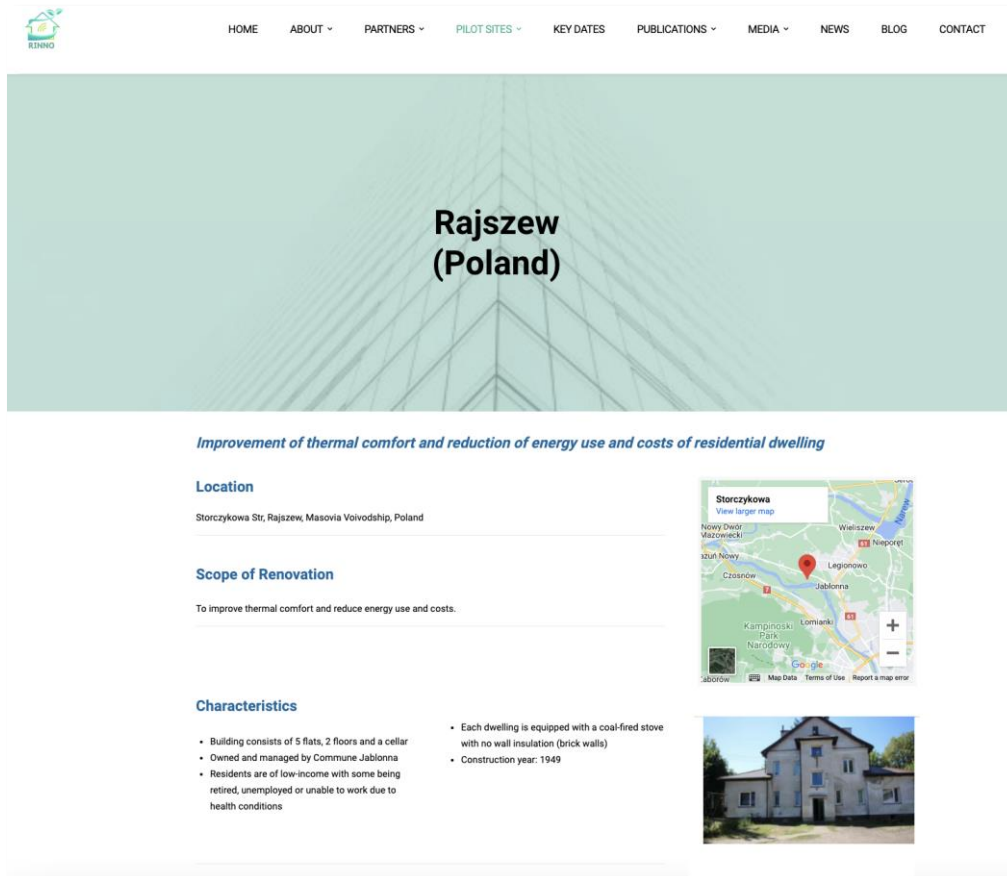


Figure 15. Exemplar Individual Partner Page

2.2.6 Pilot Sites

A page for each Pilot Site has been created. These pages provide a summary of the key characteristics of the pilot sites to demonstrate the RINNO renovation framework, as well as

the scope of renovation, the responsible partner, and the proposed key technologies and transformation measures employed. Figure 16 presents an exemplar pilot site page. The page dedicated to the Danish pilot site is currently offline due to recent changes but it will be published as soon as the project amendments have been approved.



Rajszew (Poland)

Improvement of thermal comfort and reduction of energy use and costs of residential dwelling

Location
Storczykowa Str, Rajszew, Masovia Voivodship, Poland

Scope of Renovation
To improve thermal comfort and reduce energy use and costs.

Characteristics

- Building consists of 5 flats, 2 floors and a cellar
- Owned and managed by Commune Jablonna
- Residents are of low-income with some being retired, unemployed or unable to work due to health conditions
- Each dwelling is equipped with a coal-fired stove with no wall insulation (brick walls)
- Construction year: 1949

Figure 16. Exemplar Pilot Site Page

2.2.7 Key Dates

Key dates in the project are presented on this page. It provides up-to-date information about the results achieved by the project, license details, and direct links to online repositories where available, and will be expanded on as the project progresses.

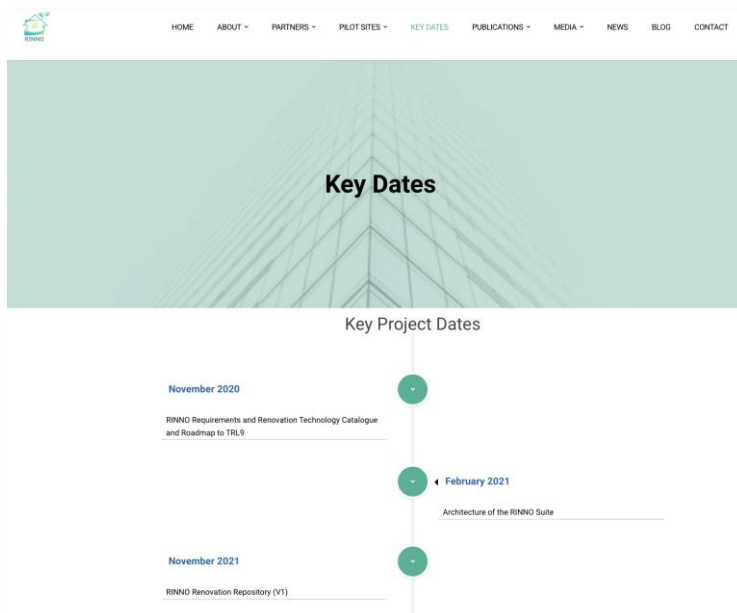


Figure 17 Key Dates Page

2.2.8 Public Deliverables

The Public Deliverables page provides an up-to-date list of the required and publicly available RINNO project deliverables. Each deliverable will be downloadable directly from this page.

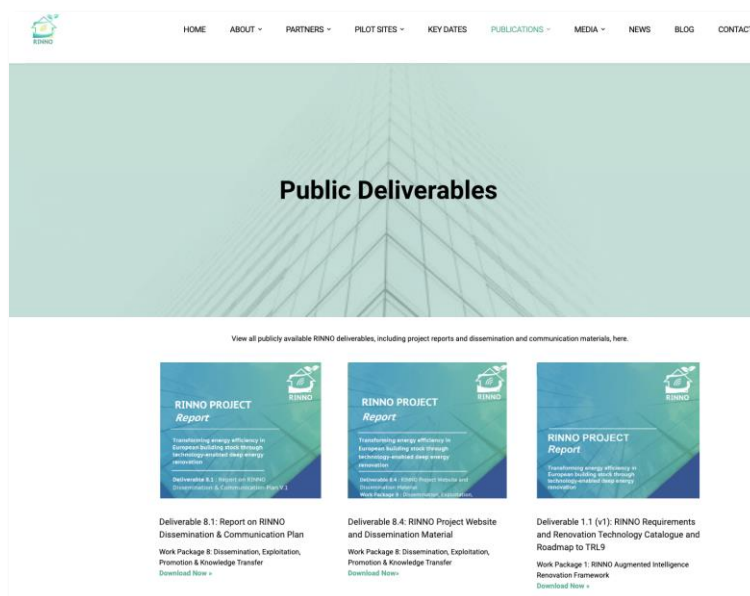


Figure 18 Public Deliverables Page

2.2.9 Journal Articles

The Journal Article page was created in Y2 following the publication of the project's first peer reviewed journal article in M12. A link to the publication is available on the page and all future journal articles will be made available in a similar fashion.

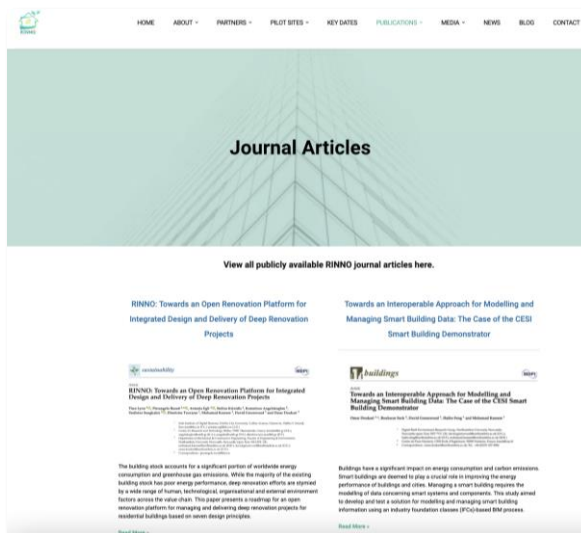


Figure 19. Journal Articles Page

2.2.10 Conference Papers

The Conference Papers page was created in Y2 following the availability of research articles presented at academic conferences. A link to the proceedings' repository is available on the page together with a brief description of the paper (see Figure 20). All future conference papers will be made available in a similar fashion.

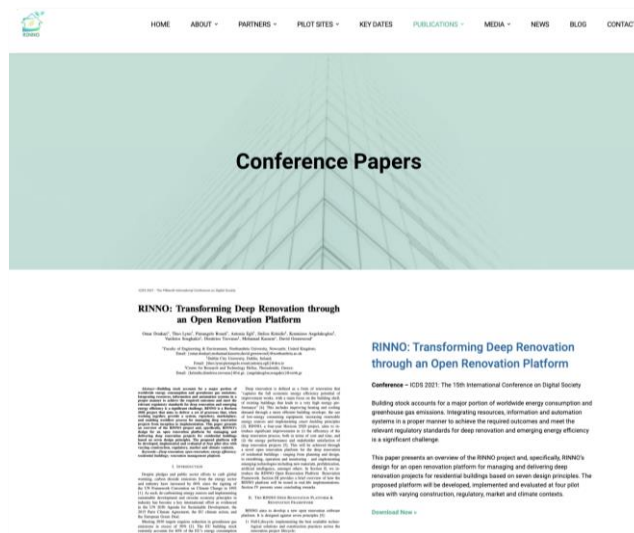


Figure 20 Conference Papers Page

2.2.11 Media Pack

The Media navigation header is the main source of RINNO dissemination material. It has six categories – Media Pack, Videos, Market and IP Briefings, Photo Gallery, Presentations, and Podcasts. As the project progresses, more items will be added and made available for public consumption, such as market and technology briefings. Currently, all public dissemination material is available on the Media Pack page – this includes the project fact sheet, localised project flyers and the project logos.

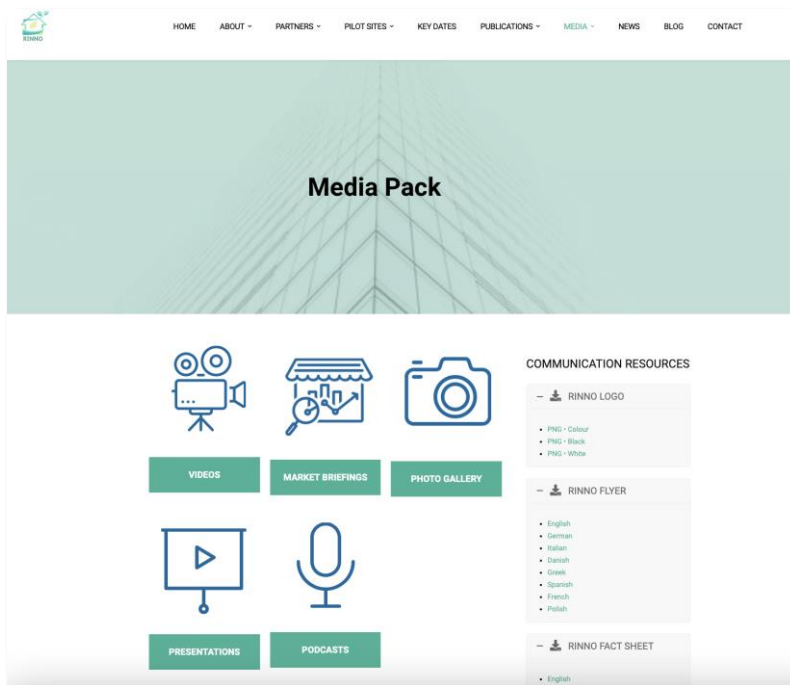


Figure 21. Media Pack Page

2.2.12 Videos

The Videos page presents all YouTube links to all video recordings of (1) RINNO presentations at scholarly or industry events and (2) RINNO technology demos. These are added to as the videos are published and are linked to the RINNO YouTube account to ensure faster page loading speeds and increase clicks on RINNO's social media channels.

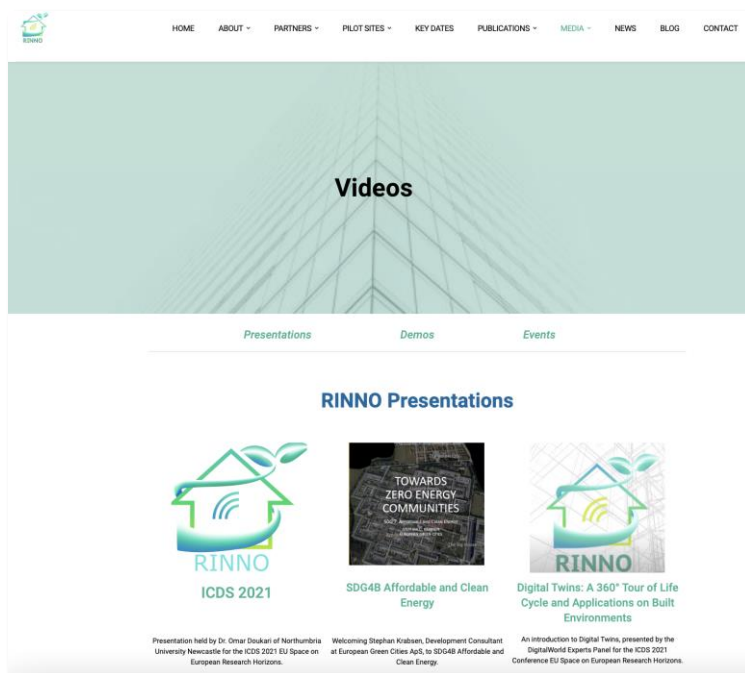


Figure 22 Videos Page

2.2.13 Photo Gallery

The RINNO Photo Gallery page shows snapshots of major RINNO events. As in-person events were adversely impacted by COVID-19, the number of pictures presented in this page is still limited despite. However, as restrictions are lifted, we expect to increase the number of images significantly in Y3 and Y4.

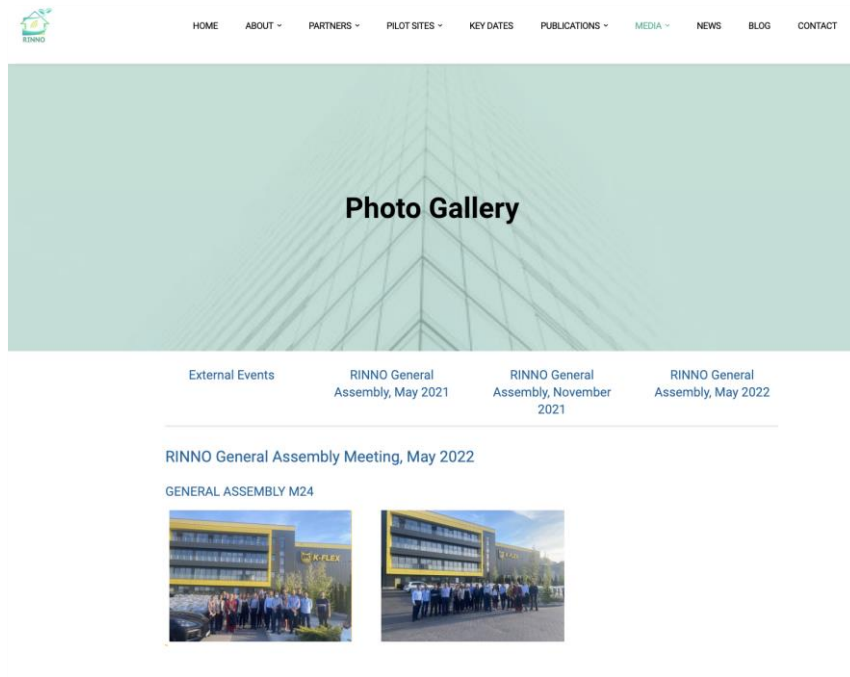


Figure 23 Photo Gallery Page

2.2.14 Presentations

The Presentations page presents users with an embedded link to the RINNO SlideShare account. This account currently hosts eight slide decks used for RINNO presentations at industry and scholarly events in Y1 and Y2. All future presentations will be made available in a similar fashion.

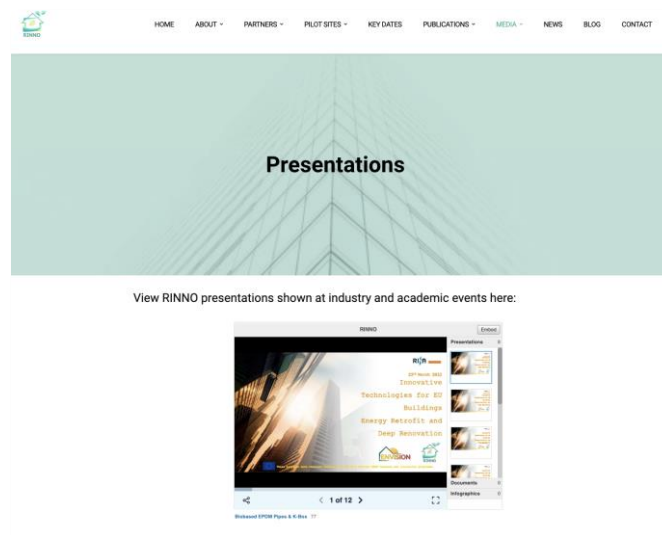


Figure 24 Presentations Page

2.2.15 Podcasts

The newly added Podcast page presents all podcast episodes recorded in collaboration with dotLAB Radio at DCU. These podcasts are available on Spotify, Buzzsprout, or Apple Podcasts with direct links provided on this page (see Figure 25).

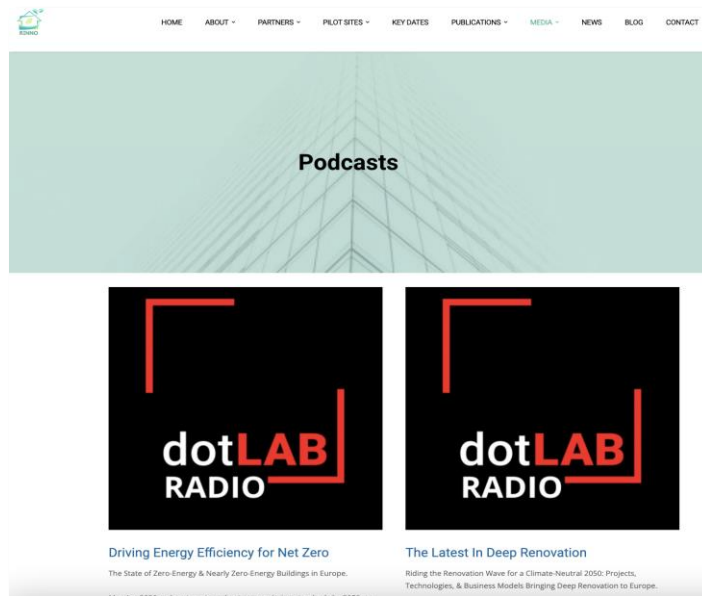


Figure 25 Podcasts Page

2.2.16 News

The News page provides regular updates on the RINNO progress, achievements, and upcoming activities. Posts can be filtered by either Media Mentions or Press Releases for ease of access.

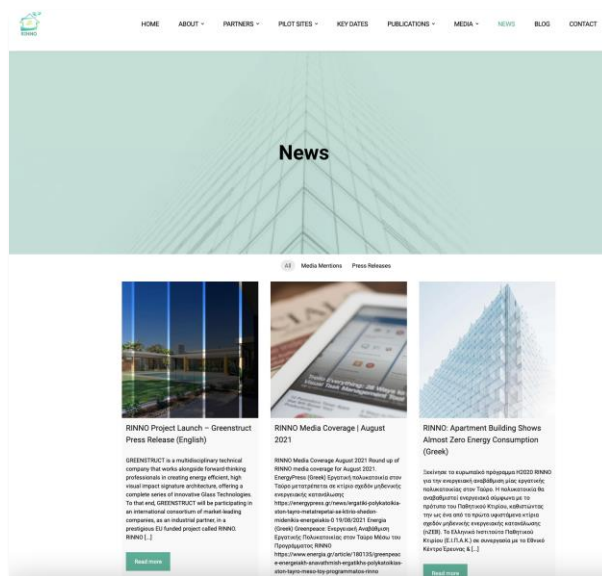


Figure 26. News Page

2.2.17 Blog

The Blog page

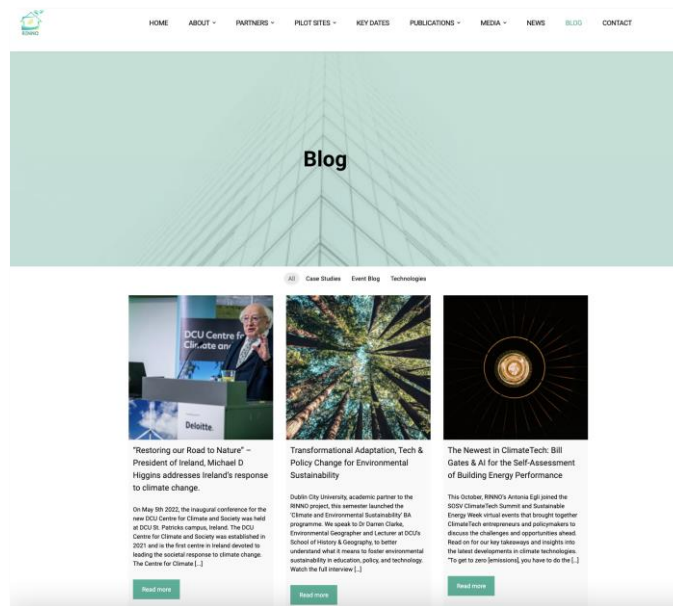


Figure 27 features regular updates on the project, authored by RINNO partners or, in future, guest authors. Blogs can be filtered by type – i.e., Case Studies, Event Blogs, and Technologies – for ease of access.

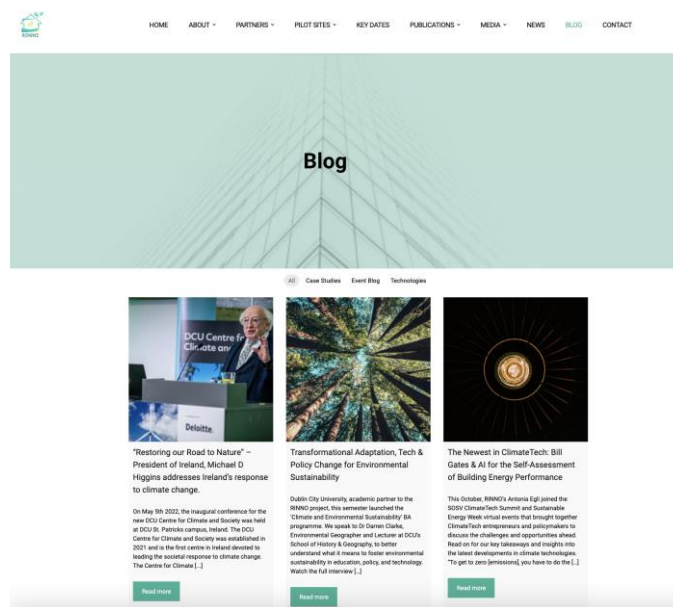


Figure 27. Blog Page

2.2.18 Contact

The Contact page displays the contact details of the Project Coordinator. A GDPR-compliant contact form is also present on the page.

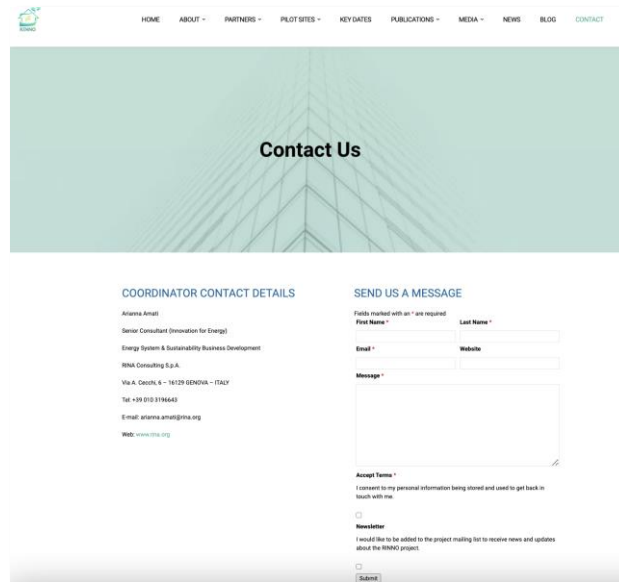


Figure 28. Contact Page

3 Cookie Compliance

A cookie acceptance plugin continues to be active on the site and makes visitors aware of the cookie policy by displaying a pop-up notification along the footer of the page. As the website is maintained by DCU, the site falls under the cookie and privacy policies operated by Dublin City University. After the Accept button is clicked, a small tab remains visible in the footer.

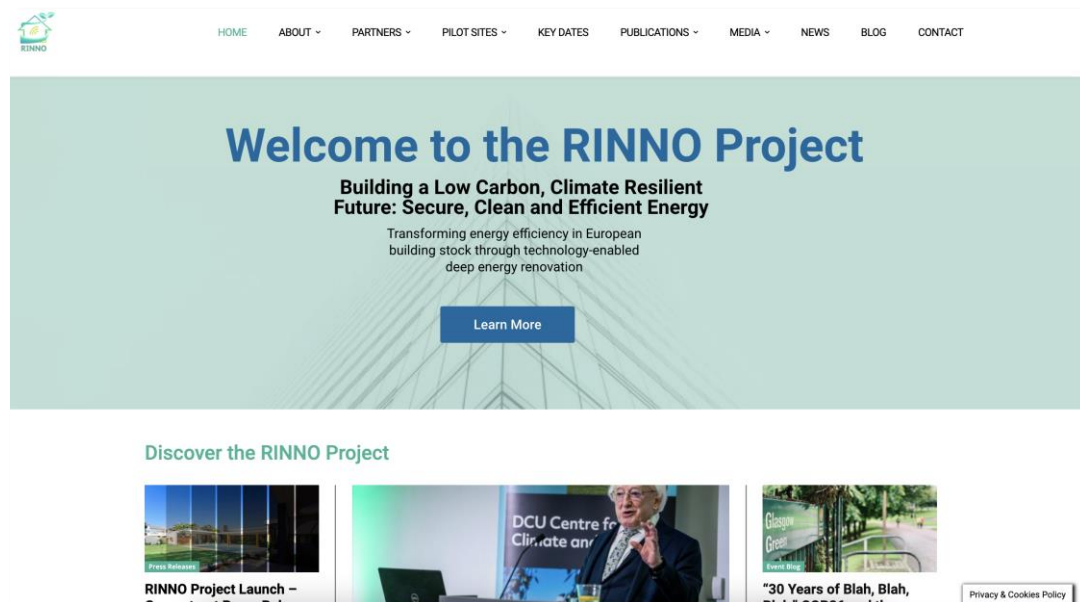


Figure 29. Cookie Compliance Pop Up

4 Usability Considerations

The RINNO website is simple in its design, layout, and functionality, prioritising visitors' needs and allowing them to accomplish their goals quickly through easy navigation, clearly defined information architecture, and a high quality of page information provided. The site navigation is clearly defined and uses drop-down elements where necessary to show the hierarchy of the pages.

4.1. Web Style Overview

The website conforms to standard website UI and functionality and was built using the WordPress CMS (Content Management System). The site was built utilizing HTML5, CSS and PHP; a widely used general-purpose framework that is especially suited for web development.

4.2. Accessibility and Browser Compatibility

Live accessibility and browser testing was undertaken on the updated site using the PowerMapper live application. This allowed the website so to be tested in real time on major desktop browsers such as Google Chrome, Firefox, Safari, Internet Explorer and Microsoft Edge. Mobile operating systems browsers were also tested including iOS, Android and Windows Phone OS with no major issues found.

W3 Schools accessibility guidelines were followed when updating the RINNO site. These guidelines were used to ensure that the site was accessible by all users. These guidelines include ensuring link texts are descriptive, text size is large enough for all to read, ensuring that the colour contrast between items is not too low etc.

4.3. Responsive Design

The use of a responsive design ensures that webpages render well across all devices and screen sizes. The RINNO website was built and updated using responsive WordPress themes and optimised for display on mobile devices. Google's Mobile Friendly Test confirms that the site's design is mobile friendly as shown in Figure 30.

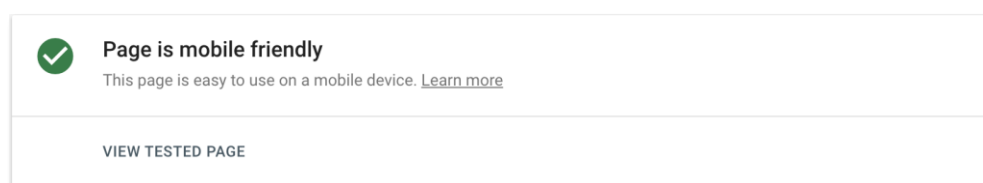


Figure 30. Google's Mobile Friendly Test

4.4. Page Layout

Page design and layout is consistent throughout the site. Each page is divided in three sections: a header, a content container, and a footer at the bottom.

4.5. Page Load Speed

The speed of a website is very important in terms of its usability. The page load speed of the RINNO site has been tested using Google's PageSpeed Insights Figure 31. The adoption of the new theme and the re-design of the entire site has contributed to a significant improvement in the page load speed in comparison to M3 (see Figure 31 and Figure 32). Page load speed will be continuously monitored using Google's PageSpeed Insights and optimised. WordPress plug-ins Smush and Nitropack, have been installed to optimise image sizes and enable lazy loading which improve site speed.

To achieve faster page load speeds, we are working to improve the initial server response time and ensuring all images are uploaded in the correct format as this is having the greatest impact on page load speed.

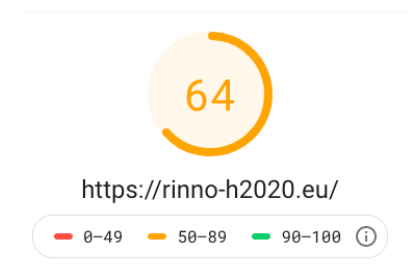


Figure 31. Page Load Speed – Desktop (M3)

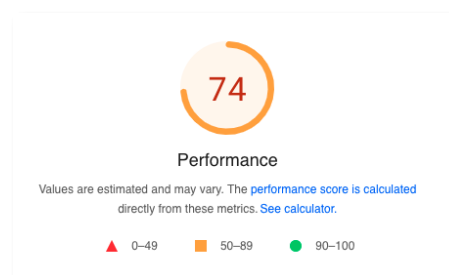


Figure 32 Page Load Speed - Desktop (M24)

4.6. Structured Data

Structured data is code which provides information about a page and helps search engines like Google better understand the content of a webpage. The use of structured data on a webpage can lead to richer snippets on the search engine results page which would ultimately increase a page's visibility and click-through-rate. The type of structured data mark-up used varies depending on the type of webpage, for instance, article mark-up would be used for articles and blog pages, or event mark-up for event pages. Structed data such as including the correct structured data type for the organisation, about, contact, blog and news pages. Breadcrumbs have also been implemented as part of structured data. This structured data has been embedded into each page of the project website using the Yoast SEO plugin and tested using Google's Rich Results Test (Figure 33).

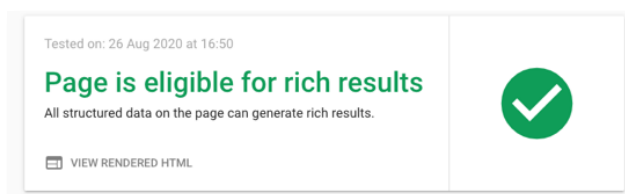


Figure 33. Rich Results Test

4.7. Usability Testing

In order to test how users interact with the project website, a usability test was conducted on both the original and the revised versions of the website using Loop11, a user testing tool which allows you to record users navigating a website whilst carrying out specific tasks set by the tester. 24 users (12 for each version of the website) from the RINNO target audience as presented in D8.1 and D8.2 (e.g., architects, engineers, researchers etc.) from Europe and the United States were sourced using an online panel provided by Loop11. Five second, first click, and navigation testing were also conducted using UsabilityHub.com. These additional tests allow site creators to measure how well a design quickly communicates a message to users. The usability testing of RINNO's re-designed website and user interface was completed in M23 with the goal of identifying any usability problems, collecting qualitative and quantitative data surrounding the ease-of-use of pages examined, and determining participants' satisfaction with the design. Further changes were made based on the results.

4.7.1 Five Second Test

As part of this test, users were shown the homepage for five seconds and were then asked to state the name of the project and their first impression of the website. Table 1 reports the answers provided for both the old and the new design. The results suggest a clear improvement with the new design. More specifically, 92% of participants answered correctly or somewhat correctly (writing, for example, "RINNO," "Rhinno," or "Rhionn project") when presented with the revised design of the homepage and only one user could not remember the name of the project and stated that it didn't stand out. The name of the project was also misspelled less frequently with the new design and this should result in higher site discoverability on search engines.

When presented with the revised design of the homepage, the majority of participants (58%) understood that the purpose of the project was to build low carbon future through by increasing the use of clean and renewable energy. 34% of the participants also thought that the purpose of the project from the homepage was to help build a sustainable future. One participant (8%) believed the purpose of the RINNO project was to teach software. As such, more participants from the newly designed website have a better understanding of the project's purpose than the original website suggesting that the copy of the new homepage is somewhat more effective and clear than its previous version.

Table 1. Five Second Test Responses

Question 1	Responses Original Site	Responses Redesigned Site
What is the name of the project this website is for?	RHINO PROJECT	Rinno
	Rhinno	i didn't see the same of the project. i think i did but can't remember. it didn't stand out
	RINNO	Rhinno
	Rhino Project	Rinno
	RIINO	RINNO Project
	rhino	The RINNO Project

	Rhino Project	RINNO
	Rhino	Rinno
	Rhino project	RINNO
	Role	Rinno Project
	Unknown it didn't load	Rhino
	Rinno	RINNO
Question 2	Responses Original Site	Responses Redesigned Site
What do you think this project is for?	The project is looking to build a future with	renewable energy
	Ease of use for construction firms	i remember it mentioning climate and zero emission and sustainability so to help business with that
	I was not able to see the page for more than 1 second	Secure, carbon clean project
	To protect the environment	Introduce project and invite participation from interested stakeholders in the low carbon economy
	clean energy use and development	To build a green technology in the industry
	Protect rhinos from endangerment?	To build low carbon, climate friendly and sustainable energy.
	Managing construction work	Low carbon, low emissions, helping to combat climate change
	To better our environment	building more environmentally friendly projects
	Building and construction	To build and use cleaner energy and be more sustainable.
	It is to get a better understanding of how to perform a project	Green Energy Construction
	Unknown	To teach software
	Building-related	Building low carbon energy

As part of the five second test, users were also asked to provide feedback on what they liked most about the design and what they would change about it. The primary element of the RINNO page design that participants liked most was the colour scheme and the ease of navigation. Many of the participants also liked the text that was contained in the header.

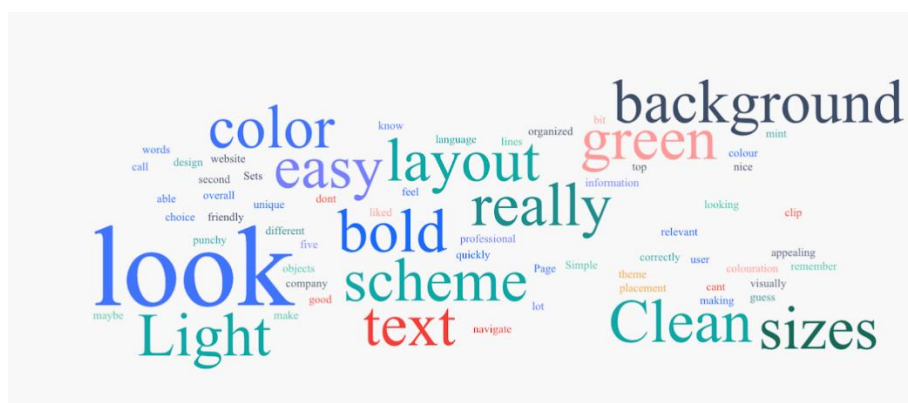


Figure 34 Page Design, Positive Feedback

With regard to potential improvements, a few users recommended making the name of the project stand out more against the rest of the text on the homepage. Other actionable suggestions from participants were to include additional imagery or a video on the homepage

to communicate the vision of the project upfront. These recommendations were implemented by adjusting the sizing, font, and colour of the homepage banner, adding background imagery to the in-line Newsletter sign up section, and adding a video introducing the RINNO project to the homepage.

4.7.2 First Click Test

First Click testing examines which element of the interface a participant would click first when asked to complete a specific task on a website. This test determines whether the navigation on the site is clear and was used to ensure that the structure and elements of the revised allow users to intuitively find key information about the project. Research participants were presented with three separate tasks:

1. *“A new academic partner has joined the project, you wish to know more about this partner. Where would you click?”*

The heatmap presented in Figure 35 shows that participants largely found the correct navigation tab when completing this task.

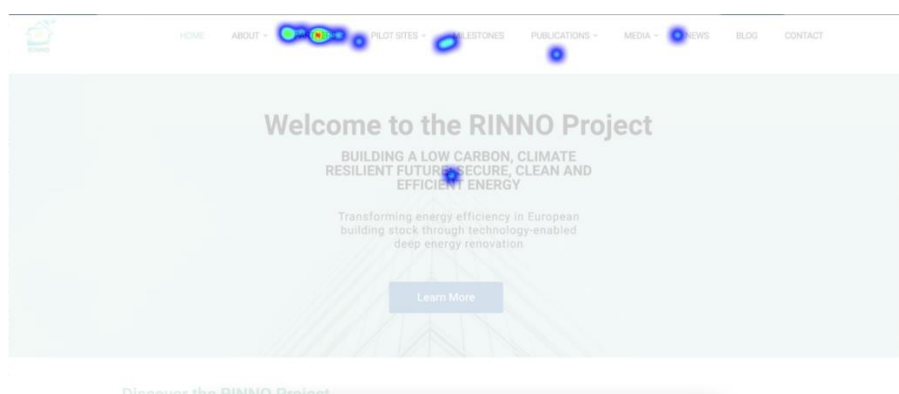


Figure 35 First Click Test – Task 1

2. *“You wish to know more information about the key dates on the project. Where would you click?”*

The heatmap in Figure 36 shows that the majority of participants did not click on the intended “Milestones”. With many clicking on “Publications” or the “Learn More” CTA available on the homepage. To overcome this issue, the name of the relevant page was changed to “Key Dates”.

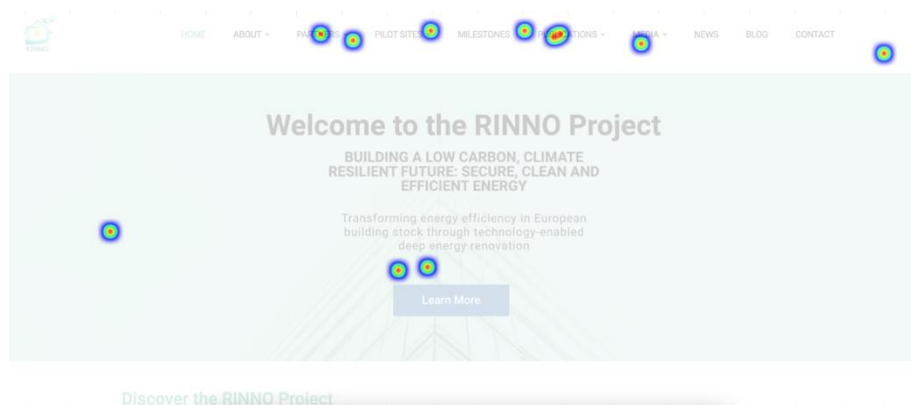


Figure 36 First Click Test – Task 2

3. “You want to watch a presentation by RINNO, where would you click?”

As shown in Figure 37, most participants clicked on “Media” which was the intended section. Some participants also clicked on the publications or the “Learn More” CTA. This represents a significant improvement compared to old design where most participants clicked on “Publications”.

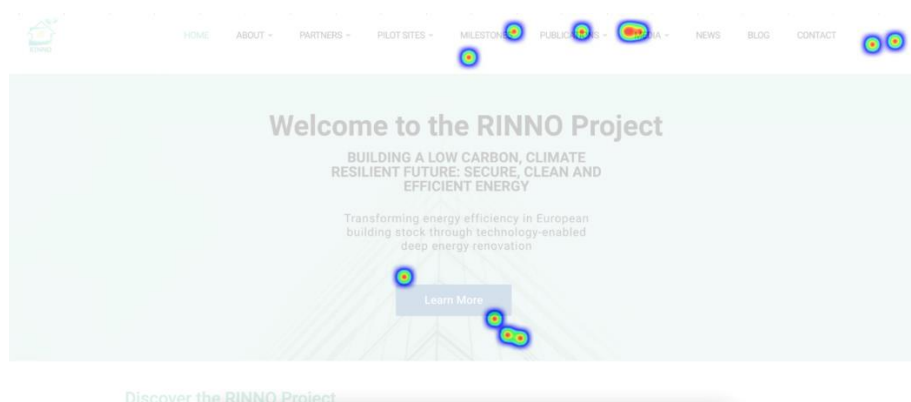


Figure 37 First Click Test – Task 3

4.7.3 Navigation Test

Similar to first click testing, navigation tests are used to check whether users can find the right actions to take for conversion. Participants were given tasks to complete in order to confirm that the navigation options on the revised site were communicated clearly:

1. *Participants were shown the homepage and asked “You are curious to learn more about the project. Where would you click to discover more about the project?”*

Participants completed this task in an average of 1 minute and 6 seconds. The most common success path for participants was navigating from the homepage to the About page via the main navigation. Several participants clicked on the homepage header CTA, which brought them to the About page. A few participants did not take the intended success path and navigated to the News or Blog pages to find out more about the project. When asked, participants found locating more information about the project very easy to find (75%) with one participant (8.3%) giving a neutral response to finding

this information. None of the users found the information difficult to find while one user did when testing the old design. Overall, this result suggests that the new design is successful in making the background information about the project more accessible to users.

2. *Participants were asked to sign up for the newsletter.*

Participants took an average of 54 seconds to complete this task and an average of 5.6 pages to sign up for the newsletter. The majority (58%) followed the expected success path, namely to scroll mid-way down the homepage to locate the newsletter sign up. 17% of participants initially scrolled to the footer of the page as this is where they usually expect the newsletter sign up to appear. These participants then scrolled closer to the top of the page to locate the correct sign-up call to action (CTA). 25% of participants navigated to the News page first to sign up to the newsletter. Once they could not locate the sign up here, they navigated back to the homepage and were then successful. 1 participant signed up to the newsletter through the “Contact” page. This represents a significant improvement compared to the old design where 34% of the users clicked on incorrect pages such as “News” or “Blog”.

3. *Participants were asked to download a public deliverable from RINNO.*

The participants took an average of 51 seconds and an average of 5.8 pages were visited to complete this task. The most common success path, as completed by 67% of participants, was to use the main navigation to locate the Public Deliverables page. The most common fail path for this task was to navigate to the Deliverables page under the About tab. 33% of participants took this path and failed to download a public deliverable. To overcome this issue, hyperlinks to public deliverables were added to the “Deliverables” page providing an alternative path for users to download them.

5 Google Analytics

Google Analytics tracking code was embedded into the HTML code of all website pages to track user activity and behaviours. Google Analytics provides real-time information on website traffic sources and demographics allowing for the monitoring of user engagement and traffic growth. Figure 38 below shows the RINNO website audience overview since its launch in June 2020 (M1) until May 2022 (M24).

In addition to Google Analytics, a Downloads plugin was installed to track downloads of public deliverables, publications and the project flyer. RINNO uses Mailchimp as a customer relationship management (CRM) solution and for email marketing campaigns; Mailchimp also provides email performance metrics such as open rates and unsubscribe rates.

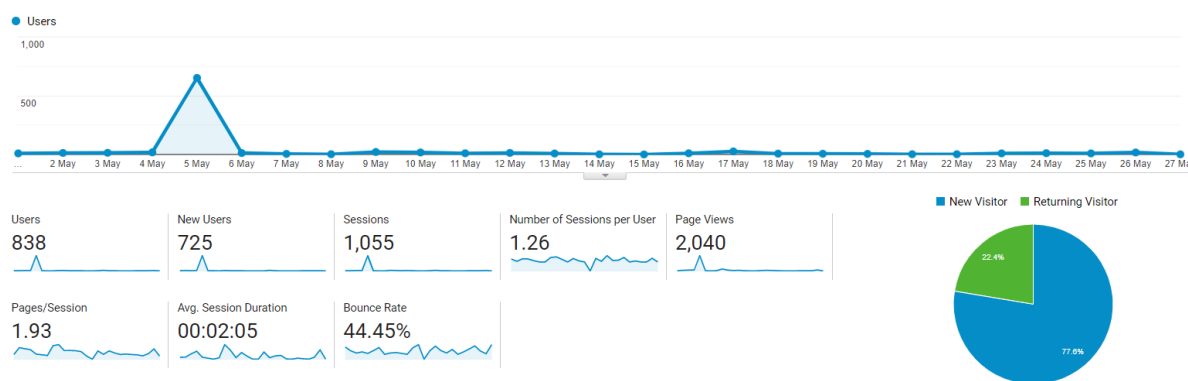


Figure 38. Google Analytics Audience Dashboard

Further information on the specific performance of the website are reported in D8.7.

6 Search Engine Optimization

To enhance the visibility and accessibility of the website on search engines such as Google, a Search Engine Optimization (SEO) plug-in named Yoast was added to the site in M3. Yoast SEO enables users to define a set of descriptive tags, determine appropriate focus keywords and assess the readability of content.

The site is also regularly analysed for SEO issues using Moz Pro, an enterprise marketing analytics tool for identifying on-page, site-wide, and offsite (inbound) search issues and competitive benchmarking. The RINNO site is regularly fine-tuned based on this analysis and any errors resolved.

Google Search Console is another tool which is used to regularly monitor, maintain, and identify errors that may impact the site's performance in Google search results. Google Search Console is used in addition to Moz Pro to resolve any errors on the RINNO site. Search Console is also used to provide insight on how the RINNO site is performing on organic search and allows users to adjust the site in Google index.

6.1. Site-wide Crawl Diagnostics

Site-wide SEO can be prioritised under three major headings: site-wide errors, site-wide warnings and site-wide notices. Site-wide errors include 4XX client errors, 5XX server errors, missing or empty titles, duplicate page content and duplicate page titles. Identification and removal of crawl errors and issues relating to the information architecture of the site that can, if left untreated, affect search engine crawler accessibility, search engine rankings and website usability. As at M24, the site currently has no crawler issues (Figure 39).

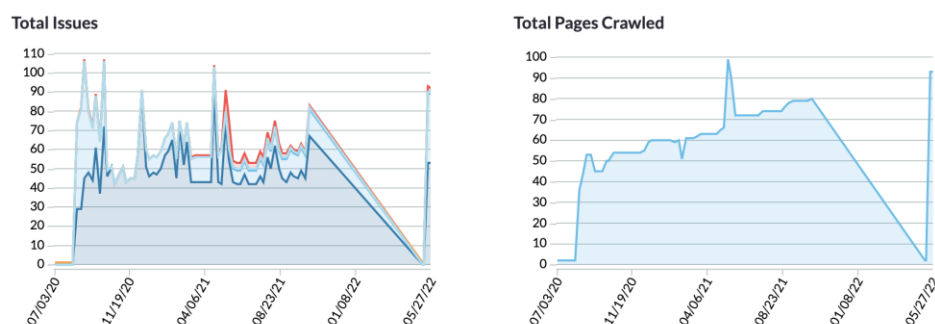


Figure 39 Moz Site-Wide Crawl Graph

6.2. Optimization of On-Page Content

On-page search engine optimisation refers to the practice of optimizing the content and source code of a page to meet the following criteria:

- Provide unique, authoritative value.
- Content and navigation are easily consumed by visitors.
- Keyword-targeted and relevant to the user's search query and reason for visiting the website.

- Shareability through social networks via the use of protocols for optimization of meta tags.
- Authorship, meta data, schema to include appropriate use of structured metadata, micro data and other mark-up options.
- Multi-device compatible.
- Metadata for text and media content.
- Structured data to support knowledge boxes.

Content, particularly when written for the website blog, is optimised for relevant keywords during the writing process to ensure efficient SEO practices. SEO metadata and image attributes are equally added as soon as content is uploaded.

The Moz Pro on-page grader is used to help understand how well a page is optimised for a target keyword and where improvements can be made on the content. Once an article is written the URL is entered into the page grader along with the keyword you wish to grade the page for. The on-page grader will look at 27 on-page SEO factors which will return a score out of 100. The report will display the results in three views – factors hurting your score, factors helping your score and all factors. Based on the results of the on-page grader issues within the content can be fix and the page can be optimised.

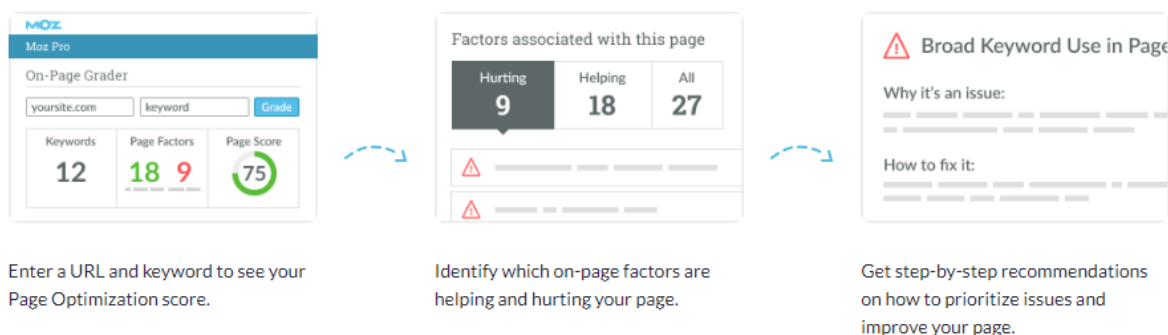


Figure 40 On-page optimization using Moz Pro On-Page Grader

6.3. Inbound Links

Inbound links are external websites linking back to the RINNO website. Links must come from high quality websites that have some combination of high domain or page authority and are considered authoritative in their respective domains.

The current domain authority (DA) for the RINNO website is 27. Domain authority is the search engine ranking score which has been developed by Moz which predicts how likely a website is to rank on the Google Search results. All RINNO partners have been encouraged to link to the RINNO website from their partner websites or through social. This in order to create additional authoritative inbound links for the RINNO site, which would in turn improve the DA score.

DCU uses a variety of tools to perform these tasks including Google Search Console, Bing Webmaster Tools, Moz Analytics and Open Site Explorer. RINNO currently has 237 inbound

links. In M23, following the revision of the RINNO website, a backlink audit has been conducted to disavow (i.e., remove) any low-quality or spam backlinks leading to the site. As a result of this backlink audit a total of 72 linking domains were disavowed from the RINNO site. It should be noted that, while the recent disavow process may have a negative short-term impact on the RINNO DA, the removal of these links will reduce the spam score of the site and therefore improve the RINNO DA in the long term.

7 Dissemination Material

A set of dissemination material has been designed, printed and delivered to the consortium members in order to support them in delivering a consistent message to stakeholders. Dissemination material is also available in digital format via the project website. A key challenge is translating highly complex concepts into understandable and intelligible language for different stakeholders.

7.1. Project Flyer

A two-sided flyer (see Figure 41) was re-designed following feedback from the first review meeting to ensure that it better reflects the project's progress at this stage. The flyer will be distributed at industry events and academic conferences where appropriate. Uncertainty about the Danish pilot site has caused some delays with the release of the new flyer which will be available for download in English, Italian, Greek, Spanish, French, and German on via project website as soon as the project amendments have been approved. An editable digital version of the flyer is available in the project repository to all partners who want to localise it in other languages. The flyer summarises the main objectives of RINNO, the proposed approach and use cases, and the expected results.



Figure 41. Project Flyer – English Version

7.2. Roll Up Banner

A roll up banner was designed and produced for the use at conferences, meetings, and presentations to increase the visibility of the project. The banner clearly communicates the key objective of RINNO and provides the links to the project website and social media profiles of the project. A digital version has been made available to all partners on the project repository.



Figure 42. Project Roll Up Banner

7.3. Promotional Posters

Two A0-size posters were created: the first includes a detailed description of the RINNO architecture, expected results and project motivation for display at academic events, while the second emphasises use cases and benefits to the project output adopters for display at booths at industry events, trade shows, and exhibitions (see Figure 42). RINNO poster templates are available for download to all RINNO partners.

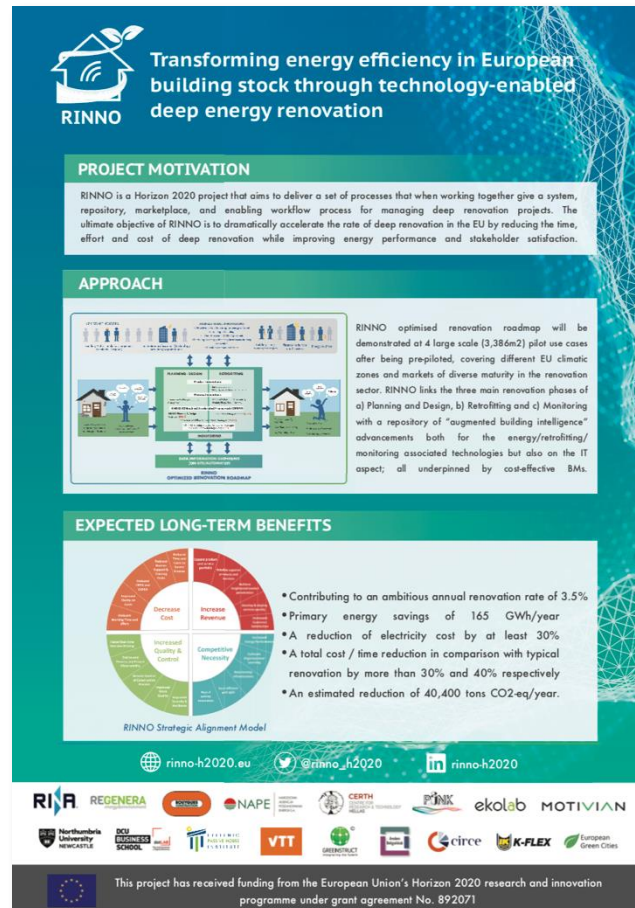


Figure 43. Project Poster

7.4. Fact Sheet

A fact sheet describing the project and outlining features and benefits was designed following the EU guidelines in respect of the template, fonts, and size and clearly summarises key project elements, the challenges it aims to address, the proposed solution, and the expected impact. This is presented in Figure 44.

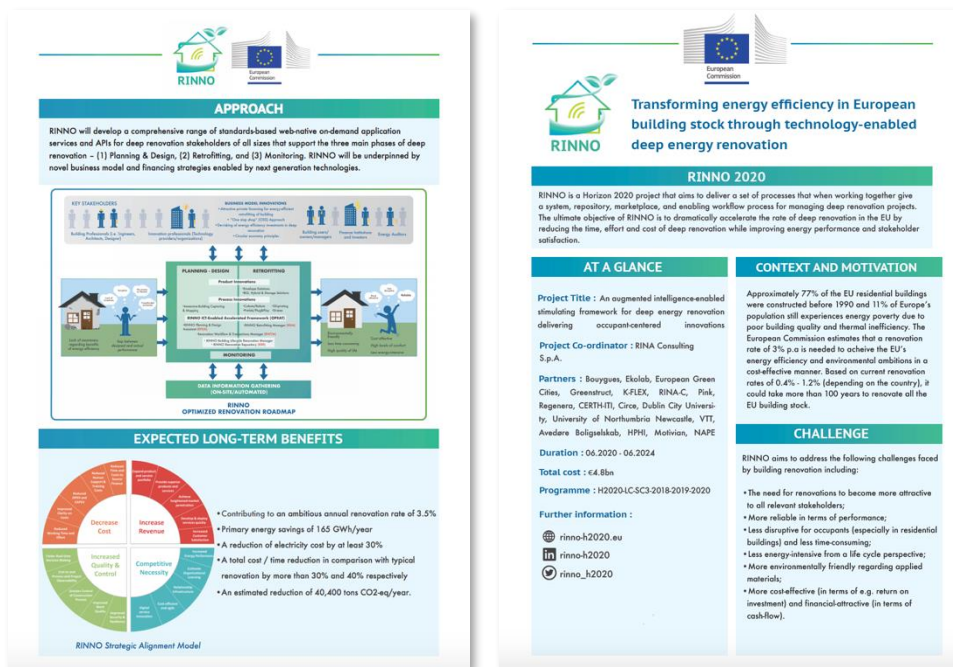


Figure 44. Project Fact Sheet

7.5. PowerPoint Presentation

A stock PowerPoint presentation was initially created in M3 to provide an overview of the project, consortium members, motivation/problem statement, use cases, architecture, benefits, timelines, and contact details. This has been constantly updated to reflect the changes and progress of the project. This presentation is available to all partners on the project repository and used for presenting the project at academic and industry events and stakeholders.

7.6. Video

A professionally produced 3- to 5-minute video was created in Y1 and published on RINNO's YouTube channel. This has been updated in Y2 to reflect the changes that have incurred in the project. The main objective of the video is to convey the core message of RINNO in lay language. This will be used at industry and academic events and disseminated via the social media channels and various media outlets.

8 Social Media

Social media plays a vital part in connecting and interacting with RINNO stakeholders. All RINNO social media accounts are listed below. These were initially created in M3 and are used on an ongoing basis to disseminate project's updates and news to different stakeholders.

Table 2. Social Media Accounts

Name	Platform Type	Content	URL
Twitter	Social	Twitter is used to identify relevant stakeholder and publish project news and updates, share website content and re-share third party content related to project and its uses cases.	https://twitter.com/rinno_h2020
Facebook	Social	The Facebook account was created for dissemination of project news and announcements as well as facilitation of paid campaigns.	https://www.facebook.com/rinnoh2020.eu
LinkedIn	Professional / Social	The LinkedIn page is used for dissemination to businesses and professionals in RINNO target areas.	https://www.linkedin.com/company/rinno-h2020
YouTube	Video	The RINNO YouTube page hosts all videos created throughout the duration of the project. The videos are categorized and tagged to increase search visibility and discoverability.	https://www.youtube.com/channel/UCaLTOzOOGDcY5Qn-smRHCig?view_as=subscriber
SlideShare	Media Aggregator	RINNO uses Slideshare to host and dissemination various media file, such as documents, presentations, and infographics. The platform allows for presentation content to be embedded on project website, thereby increasing visibility.	https://www.slideshare.net/rinnoproject
ResearchGate	Social / Academic	The ResearchGate profiles was created to communicate the project to scientists and researchers. It allows to share academic papers with the RINNO acknowledgement, post updates on the project and find potential collaborators.	https://www.researchgate.net/project/RINNO-H2020

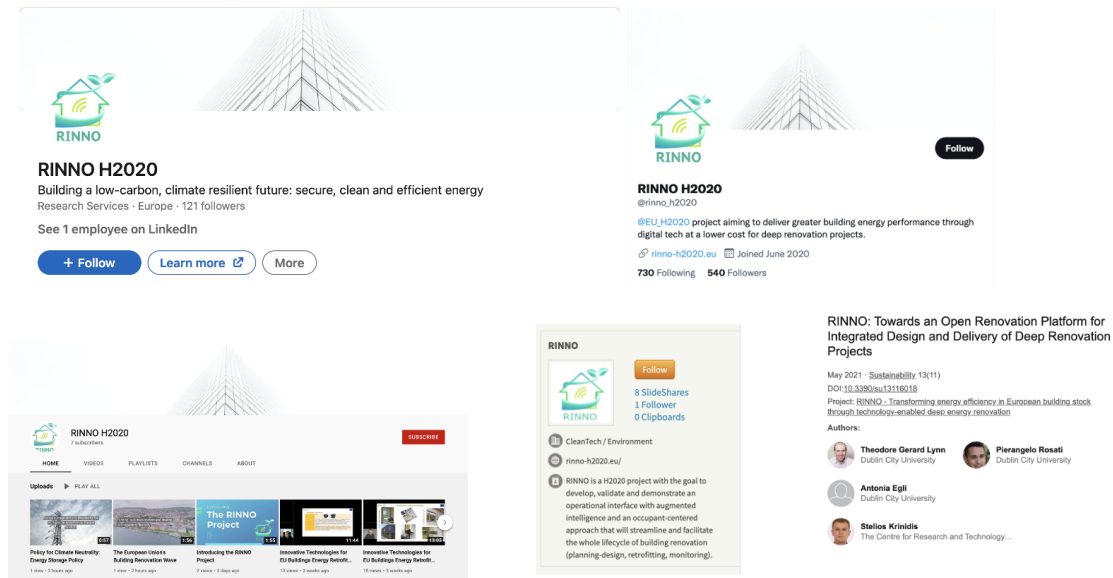


Figure 45. RINNO Social Media Accounts (LinkedIn, ResearchGate, Facebook, Twitter, YouTube, and SlideShare)

A series of professionally produced podcasts about the project are continuously recorded and published as part of dotLAB Radio, a podcast series launched by the Irish Institute of Digital Business (IIDB) and DCU Business school. Podcasts are available either for streaming or download on dedicated platforms such as Spotify, Apple Podcasts etc., and listed on the RINNO websites.

9 Conclusion

This deliverable provides an overview of the official project website (<https://rinno-h2020.eu/>) and dissemination material deployed in WP8. The website continues to act as the main repository of the project's outcomes (i.e., deliverables, academic publications, videos, presentation slides), thus making them visible and accessible to the wider audience. The website and other dissemination material are maintained and updated on a regular basis as the project advances.