



AI Platform for Integrated Sustainable and Circular Manufacturing

Deliverable

D7.1 Brand Management Materials and Web Portal

Actual submission date: 30/09/2022

Project Number: 101058585

Project Acronym: Circular TwAln

Project Title: AI Platform for Integrated Sustainable and Circular Manufacturing

Start date: July 1st, 2022 **Duration:** 36 months

D7.1 Brand Management Materials and Web Portal

Work Package: WP7

Lead partner: CORE INNOVATION CENTRE (CORE)

Author(s): Sotiris Vasiliou (CORE), Antigone Nikolaidi (CORE), Mina Tsatsani (CORE)

Reviewers: Nicoletta Picone (COBAT), Elisa Rossi (ENG)

Due date: M3

Deliverable Type: DEC **Dissemination Level:** Public

Version number: 1.0

Revision History

Version	Date	Author	Description
0.1	01/08/2022	Tsatsani Mina (CORE)	Document Creation
0.2	05/09/2022	Nikolaidi Antigoni (CORE)	Internal Review
0.3	14/09/2022	Picone Nicoletta (COBAT)	1 st Document Review
0.3	16/09/2022	Elisa Rossi (ENG)	2 nd Document Review
0.4	27/09/2022	Tsatsani Mina (CORE)	Version ready for quality check
1.0	30/09/2022	ENG	Final coordinator review before submission

Table of Contents

Table of Contents	2
List of figures	3
Definitions and acronyms	4
Executive Summary.....	6
1 Introduction.....	7
2 Visual Identity	8
2.1 Logotype.....	8
2.1.1 Logo Design	8
2.1.2 Logo Styles.....	8
2.2 Circular TwAln Colour Scheme.....	9
2.3 Typography.....	9
2.4 Design Elements and Illustrations.....	11
3 Communication Materials.....	13
3.1 Leaflet.....	13
3.2 Poster and Banner.....	16
4 Templates.....	19
4.1 Deliverables.....	19
4.2 Meeting Agenda.....	20
4.3 Minutes of Meeting	21
4.4 Presentations.....	22
5 Web Portal.....	25
5.1 Website's Structure.....	25
5.1.1 Website Navigation Tree Map	25
5.1.2 Essential Technical Features	26
5.1.3 Aesthetic Elements.....	26
5.2 Main Pages and Essential Interactive Elements.....	26
5.2.1 Main Menu & Navigation Pane on Header	26
5.2.2 Footer Section.....	27
5.2.3 Homepage.....	27
5.2.4 The Project.....	29
5.2.5 Consortium.....	32
5.2.6 Resources	32
6 Conclusions and Future Outlook	35

List of figures

Figure 2-1: Logo option 1	8
Figure 2-2: Logo option 2	8
Figure 2-3: Logo option 3	8
Figure 2-4: Logo design elements	8
Figure 2-5: Circular TwAln logo styles	9
Figure 2-6: Project's Colour Palette	9
Figure 2-7: Logo and Communication Materials Font	10
Figure 2-8: Website Font	10
Figure 2-9: Visualisation of the project's expected impact	11
Figure 2-10: Visualisation of the project's concept	11
Figure 2-11: Generic Structure of AI Application Module with its different components and relationships	12
Figure 3-1: Leaflet – Front Cover 1/5	14
Figure 3-2: Leaflet – The Project 2/5	14
Figure 3-3: Leaflet – Use Cases 3/5	15
Figure 3-4: Leaflet – Consortium 4/5	15
Figure 3-5: Leaflet – Back cover 5/5	16
Figure 3-6: Poster	17
Figure 3-7: Banner	18
Figure 4-1: Deliverables Template	20
Figure 4-2: Meeting Agenda Template	20
Figure 4-3: Minutes of Meeting Template	21
Figure 4-4: Presentation Template – Title Page in Light Background	22
Figure 4-5: Presentation Template – Title Page in Dark Background	22
Figure 4-6: Presentation Template – Work Package Description	23
Figure 4-7: Presentation Template – GANTT Chart	23
Figure 4-8: Presentation Template – Consortium	24
Figure 4-9: Presentation Template – Closing Page with Partners' Logos	24
Figure 5-1: Website Navigation Tree Map	25
Figure 5-2: Main Menu – Navigation Pane	26
Figure 5-3: Website Footer	27
Figure 5-4: Homepage – Introduction to the project	28
Figure 5-5: Homepage – Impact	28
Figure 5-6: Homepage – Facts and Figures	29
Figure 5-7: The Project – Concept & Objectives – Introduction	29
Figure 5-8: The Project – Concept's Illustration	30
Figure 5-9: The Project – Objectives	30
Figure 5-10: The Project – Technologies – Development Framework	31
Figure 5-11: The Project – Use Cases Example	31
Figure 5-12: Consortium – Partners' grid	32
Figure 5-13: Consortium – Example of company/organisation presentation	32
Figure 5-14: Resources – News & Press Releases	33
Figure 5-15: Resources – Communication Material	34

Definitions and acronyms

<i>AI</i>	<i>Artificial Intelligence</i>
<i>EU</i>	<i>European Union</i>
<i>GA Number</i>	<i>Grant Agreement Number</i>
<i>MoM</i>	<i>Minutes of Meeting</i>
<i>UX</i>	<i>User Experience</i>
<i>WEEE</i>	<i>Waste from Electrical and Electronic Equipment</i>
<i>WP</i>	<i>Work Package</i>

Disclaimer

This document has been produced within the spec of the Circular TwAln Project. Funded by the European Commission, Circular TwAln is part of the Horizon Europe Funding Program for Research and Development. The sole responsibility of this publication lies with the author. All information in this document is provided “as is” and no guarantee is provided that the information is fit for any particular purpose. The user thereof uses the information at its sole risk and liability. The European Union is not responsible for any use that may be made of the information contained therein.

Executive Summary

The present document constitutes Deliverable 7.1 “Brand Management Materials and Web Portal” created within the spec of Work Package 7 regarding the “Dissemination, Communication, Standardisation, and Impact Creation” of Circular TwAln. Specifically, Deliverable 7.1 is directly related to the Task 7.1 about the “Design and Implementation of the Communication Strategy”.

This report elaborates on the design of the project’s visual identity, communication materials, other visual elements e.g., icons and diagrams, as well as the creation of the document templates, which will be used throughout the duration of the project. Furthermore, it describes the structure and the information presented in the project’s website. All the above were carried out by project partner CORE.

The goal was to create a uniform visual image for the project where all elements are aligned with each other and with Circular TwAln’s main functions. Additionally, the materials described above serve as the main communication tools for the project and its visibility and further promotion, ensuring Circular TwAln’s message is being conveyed effectively. All elements are based on the visual identity of the project. Colour scheme, typography etc, were carefully chosen for their aesthetic effect and their agreement with the project’s essential aspects. Different versions of each element were designed in to suit different presentation contexts. This communication material is intended to be used internally, i.e., project meetings, presentations and externally in the various communication channels of the project, such as the social media and the website.

This document will be updated near the end of the project (M33), examining if targets were met and presenting all the updates which occurred throughout the project’s lifetime.

I Introduction

Circular TwAIIn is researching, developing, validating, and exploiting a novel AI platform for circular manufacturing value chains, which will support the development of interoperable circular twins for end-to-end sustainability. Based on the use of trustworthy AI techniques, the project aims to enable human centric sustainable manufacturing, fostering the transition towards Industry 5.0 as well as the integration and combination of different data from various sources, with the intent to exploit the advantages of seamless data sharing within trusted and effective manufacturing data spaces, over the entire product life cycle, considering all sustainability aspects. The project relies on utilising advanced technologies, combining digital twins interface modules and AI application modules to facilitate collaborative AI working schemes, answering the needs of the industry.

Core Innovation Centre is the leader of Work Package 7 about the ‘Dissemination, Communication, Standardisation and Impact Creation’ of Circular TwAIIn. Particularly, Core is leading Tasks 7.1 about the ‘Design and Implementation of Communication Strategy’, 7.2 on the ‘Design and Implementation of Dissemination Strategy’ and 7.5 about the ‘Market Analysis and Exploitation of Results’. Therefore, CORE is responsible for the Dissemination, Communication, and Impact Creation activities of the project, coordinating, and supervising all the respective actions within the spec of WP7 with strong collaboration of all partners. As the project evolves, all partners will be contributing to the dissemination and communication tasks according to their role, by sharing input about their progress, participating in events, organising workshops, publishing papers, and employing their established networks to enhance the dissemination of Circular TwAIIn’s results.

The initial goal of WP7 lies in creating a unified visual image for the project, where all elements are aligned with each other and effectively serve the project’s objectives and values. The following sections provide the details of how this visual identity was created.

- [Chapter 1](#) is an introduction to the project and deliverable.
- [Chapter 2](#) describes the process of designing the visual identity of the project and its elements e.g., logo, colour scheme and typography.
- [Chapter 3](#) presents all communication tools that will be used to promote Circular TwAIIn and its main functions and objectives.
- [Chapter 4](#) presents the templates to be used in the project’s internal and external communication.
- [Chapter 5](#) presents the project’s website emphasising on both the design and structure, as well as the content aspect.
- [Chapter 6](#) presents the upcoming steps and actions based on the overall strategy.

2 Visual Identity

2.1 Logotype

Building a unique, strong, and memorable visual identity is key when it comes to communicating the essence of the project. A logotype should be attention grabbing, make a strong first impression and be memorable as the foundation of the project's identity. In this respect, our efforts were directed towards coming down to the right concept for the logo while taking into consideration all the main elements, technologies, and aspects of the project. Three logos were created, each emphasising on different project aspects, but all of them illustrating circularity as a central value of Circular TwAIIn (see figures below).



Figure 2-1: Logo option 1



Figure 2-2: Logo option 2



Figure 2-3: Logo option 3

For the logo selection, partners were asked to vote digitally which one of the above versions they preferred. With the majority of the partners voting for the second option, it was selected to represent the project.

2.1.1 Logo Design

For the logo design, the proposal was analysed in depth in order to single out and prioritise the main concepts and technologies. The digital twins, seamless data sharing and the circular economy were highlighted through this process and thus incorporated in the logo design, as indicated in Figure 2-4.

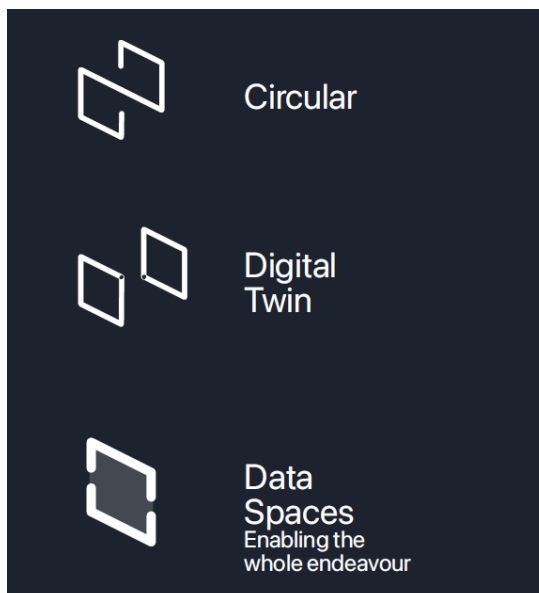


Figure 2-4: Logo design elements

2.1.2 Logo Styles

The logo design is focused on adaptability when it comes to different background colours, dark or light.



Figure 2-5: Circular TwAln logo styles

2.2 Circular TwAln Colour Scheme

The colour scheme consists mainly of red and purple hues to denote the dynamic character of the project. Additionally, a series of three toned down blue-grey colours is proposed, to complement the vibrant main palette and to be used as background colours in presentations as well as the project's website.

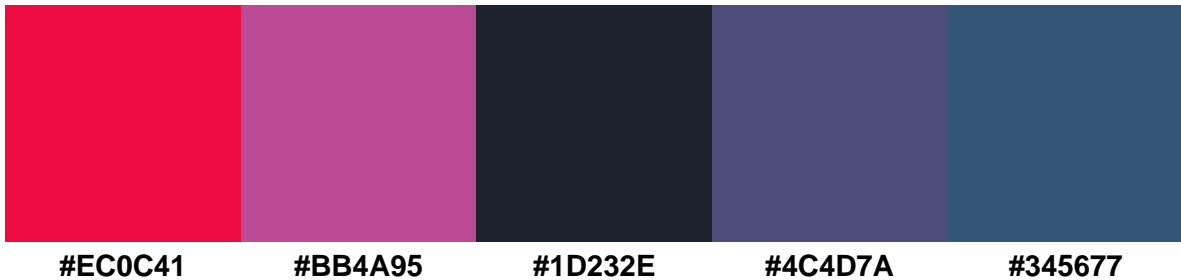


Figure 2-6: Project's Colour Palette

2.3 Typography

Typography is an essential part of the visual identity of Circular TwAln. For the logo and print materials the Neue Haas Grotesk typeface was chosen to convey clarity and emphasise on the modern innovations of the project. For the project's website we opted for the Halyard Display Typeface. This typeface is legible on various screen sizes and caters to a clean and modern look. For the templates, universally available fonts were used to ensure a seamless adaptation of the visual identity typography from all the partners, while ensuring that the integrity of the message is maintained.

Neue Haas Grotesk Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

1234567890

Neue Haas Grotesk Regular

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

1234567890

Figure 2-7: Logo and Communication Materials Font

Halyard Display Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

1234567890

Halyard Display Regular

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

1234567890

Figure 2-8: Website Font

2.4 Design Elements and Illustrations

For the project’s website and print material, icons and diagrams were designed using the project’s colour scheme to strengthen its visual identity and facilitate the understanding of the various technologies and innovations that the project will pursue. As shown in the examples below, illustrations were designed to visualise the expected impact of the project (Figure 2-9), the project’s concept (Figure 2-10) as well as the structure of AI application modules with their different components and relationships in Figure 2-11.

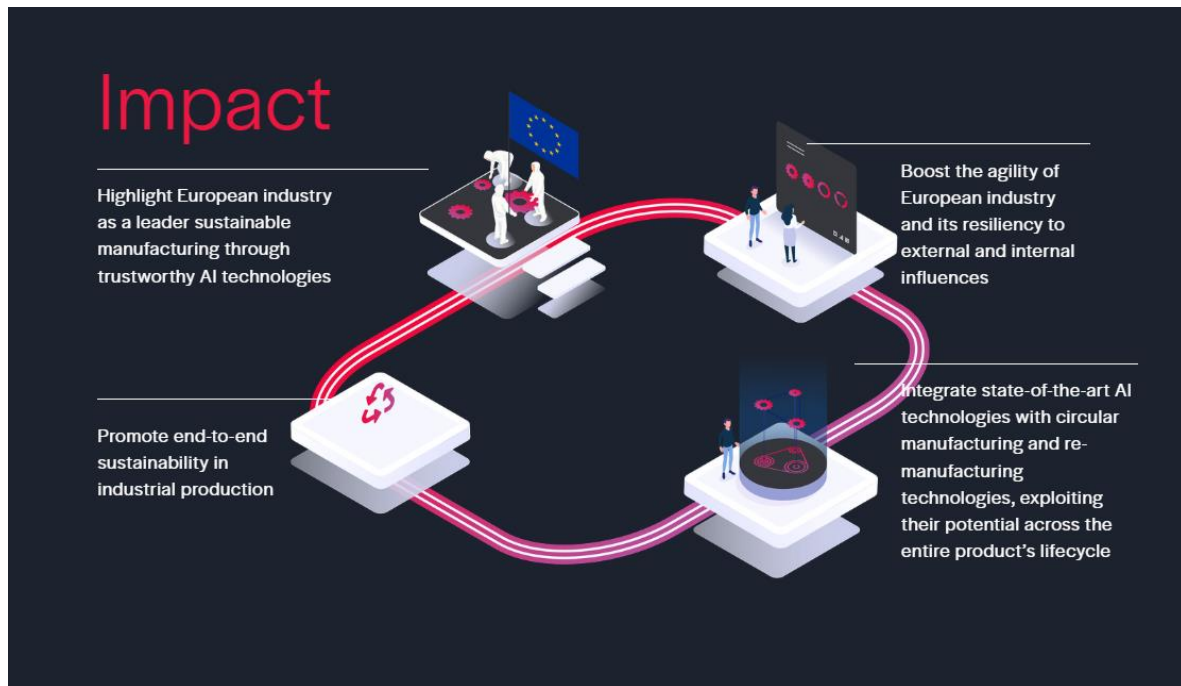


Figure 2-9: Visualisation of the project’s expected impact

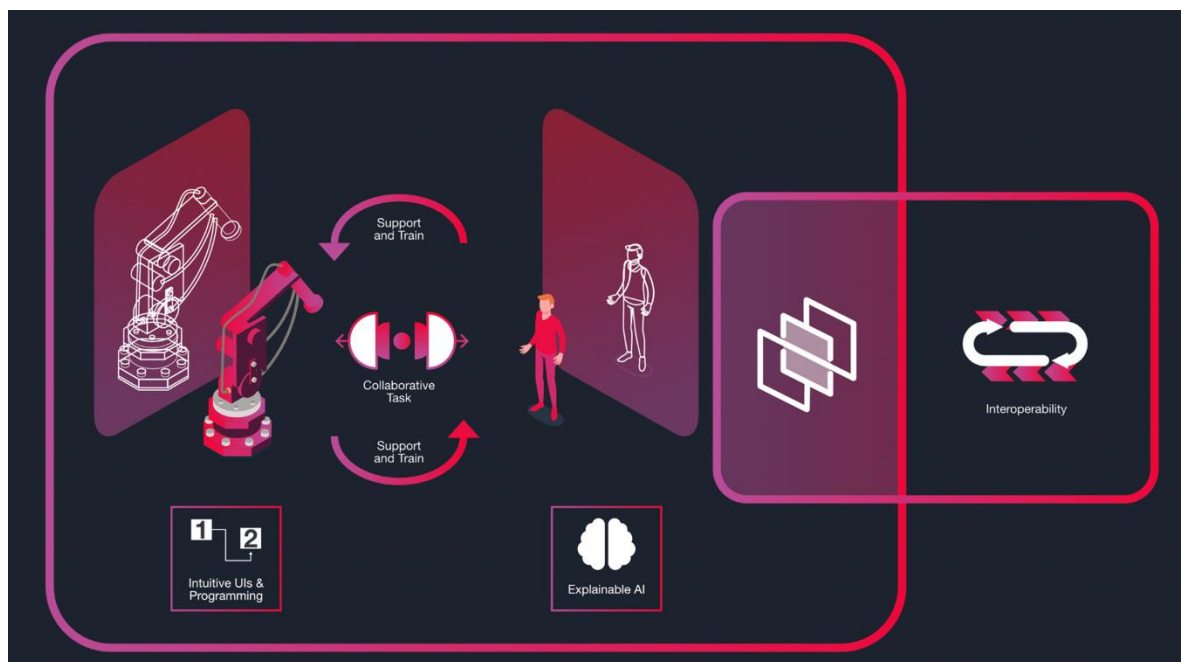


Figure 2-10: Visualisation of the project’s concept

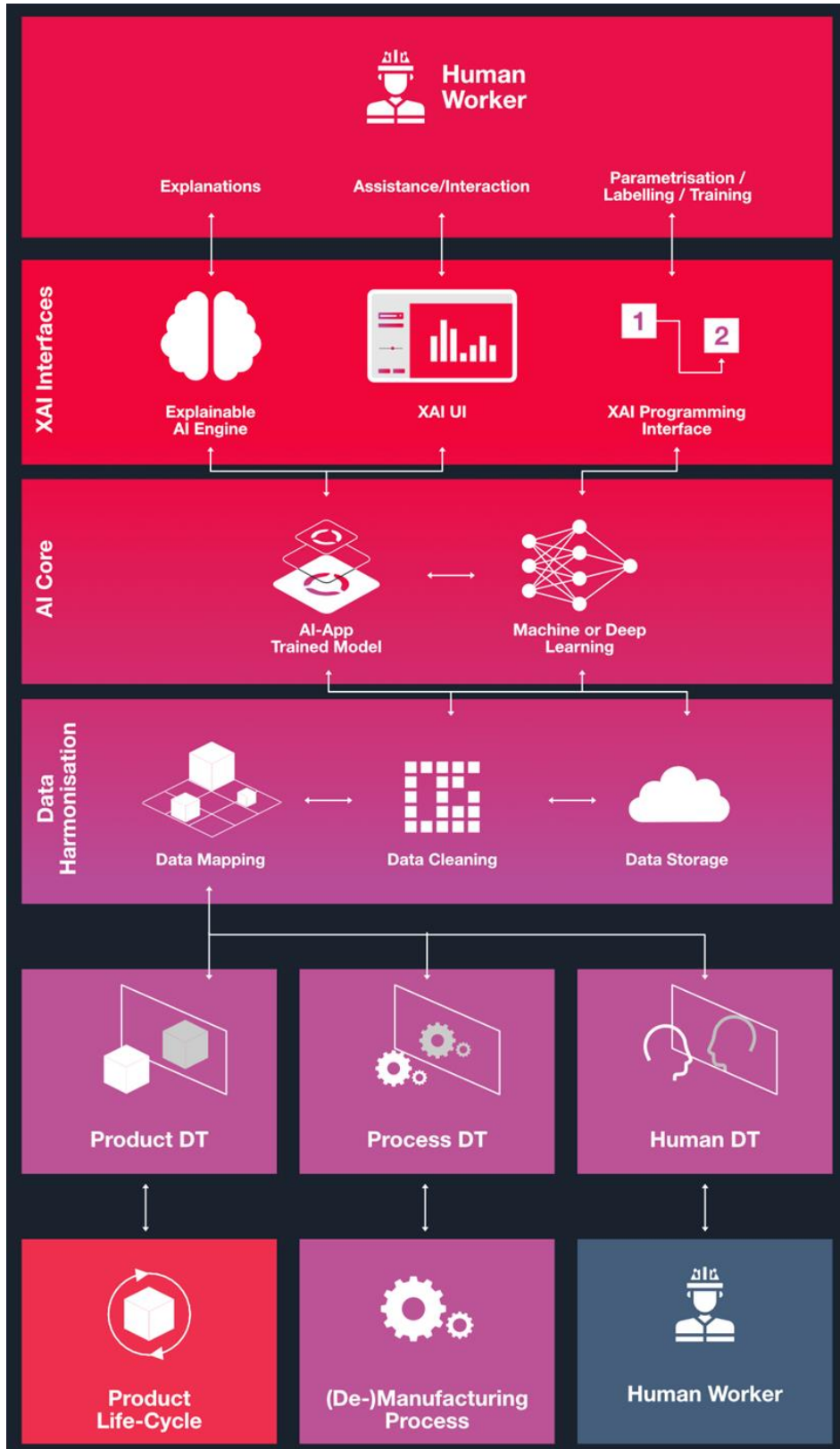


Figure 2-11: Generic Structure of AI Application Module with its different components and relationships

3 Communication Materials

Within the first 3 months of Circular TwAln, communication materials were developed to support the dissemination activities. The materials created so far are the following:

- the leaflet
- the poster
- the banner

The above will be updated if and when needed, according to the evolving needs and progress of the project.

Due to increased scalability, easier updates, and environmental considerations, Circular TwAln will mostly rely on electronic information channels. Nevertheless, being aware that printed information remains the principal instrument for informing specific stakeholder groups (e.g., participants to fairs, conferences, and workshops), printing documents were created as well.

The first version of the aforementioned files has already been distributed to the partners and uploaded to the [website](#). The visuals created for the communication material are also uploaded separately on the project's repository for the partners' convenience.

Partners will also deploy other actions to aid the project's dissemination. Depending on the needs that may arise, other material could be created, such as technical posters, videos or delegate packs at conferences or other events.

3.1 Leaflet

An A5 brochure was designed that displays the main aspects of the project. On the brochure the reader can find a brief description of the project along with an illustration to accommodate the comprehension of the project's concept. A brief presentation of the project's Use Cases is also included along with the impact it is expected to achieve. In the last pages the reader can find a brief presentation of the Consortium followed by the project's contact details and social media presence information.

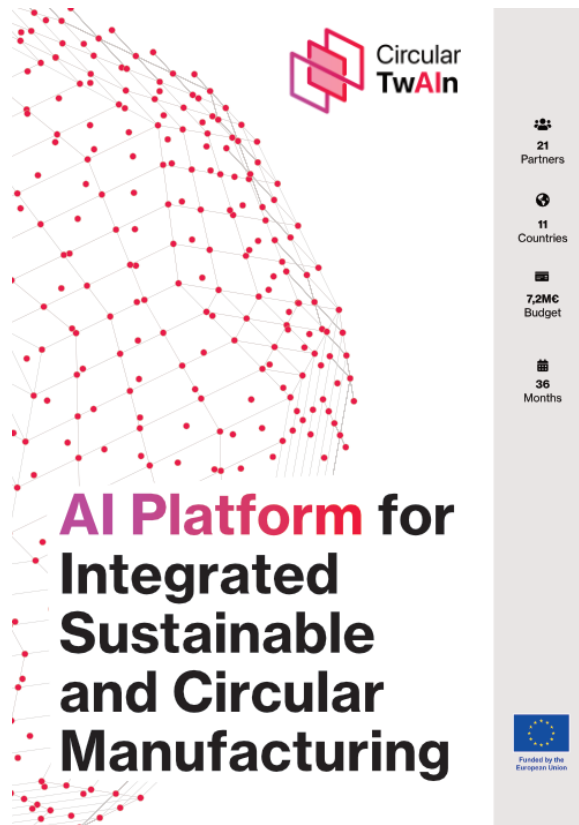


Figure 3-1: Leaflet – Front Cover 1/5

CIRCULAR TWAIN

UNLOCKING THE POTENTIAL OF CIRCULAR MANUFACTURING

The Project

Circular TwAIN researches, develops, validates, and exploits a **novel AI platform for circular manufacturing value chains**, which will support the development of interoperable **circular twins** for end-to-end sustainability.

Based on the use of trustworthy AI techniques, the project enables **human centric sustainable manufacturing**, fostering the transition towards Industry 5.0 as well as the integration and combination of different data from various

sources, with the intent to exploit the advantages of seamless data sharing within trusted and effective manufacturing data spaces, over the entire product life cycle considering sustainability aspects.

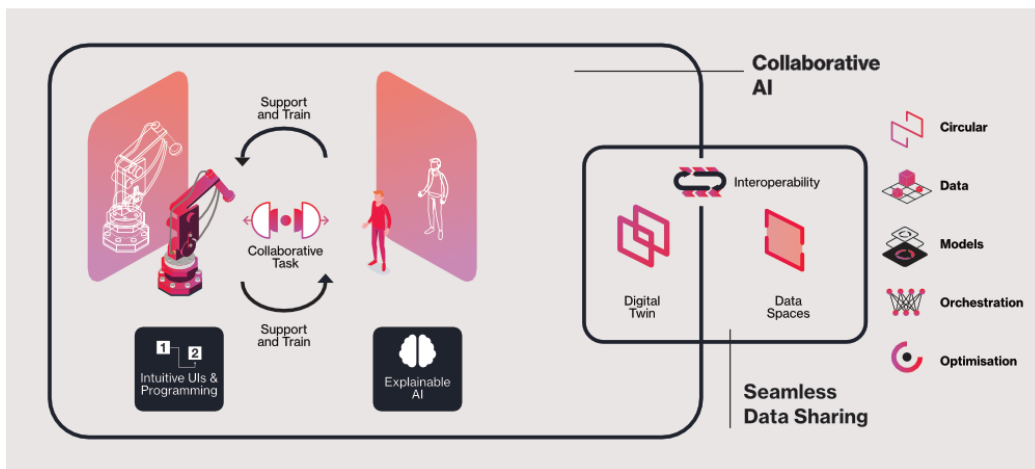


Figure 3-2: Leaflet – The Project 2/5

CIRCULAR TWAIN

UNLOCKING THE POTENTIAL OF CIRCULAR MANUFACTURING

Use Cases

Li-Ion Battery Packs in E-mobility

Deploying collaborative AI and ML to overcome the challenges of LIB packs' de- and re- manufacturing.

Consumer Electric and Electronic Equipment Waste

Overcoming the limitations of customer WEEE de- and re-manufacturing.

Petrol-Chemical Production Plants

Utilising advanced technologies to optimise energy consumption during the Petrol-Chemical production process.



Figure 3-3: Leaflet – Use Cases 3/5

CIRCULAR TWAIN

UNLOCKING THE POTENTIAL OF CIRCULAR MANUFACTURING



Sustainable manufacturing through AI technologies



End-to-end sustainability in industrial production



Industry agility and resiliency



Advanced circular manufacturing technologies throughout the product's lifecycle

Consortium

The Consortium is composed by 21 Partners across 11 European countries.

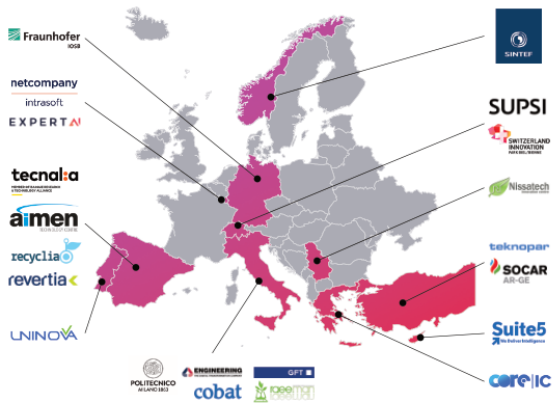


Figure 3-4: Leaflet – Consortium 4/5



Figure 3-5: Leaflet – Back cover 5/5

3.2 Poster and Banner

An A3 poster and an 800x2000mm banner (portrait) were additionally designed, carrying the project's visual identity on two larger scale formats. Their main purpose is to strengthen the project's visual identity and be able to communicate information at a glance from a distance. For this reason, those two formats carry less information and aim to convey primarily the key aspects of the project. The Consortium members and the project's communication channels, were included in both the poster and banner for anyone interested in learning more.



AI Platform for Integrated Sustainable and Circular Manufacturing

- 21 Partners
- 11 Countries
- 7,2MC Budget
- 36 Months



Sustainable manufacturing through AI technologies



End-to-end sustainability in industrial production



Industry agility and resiliency



Advanced circular manufacturing technologies throughout the product's lifecycle

@CIRCULARTWAIN

CIRCULAR TWAIN PROJECT

CIRCULAR-TWAIN-PROJECT.EU



Figure 3-6: Poster



Funded by the European Union





AI Platform for Integrated Sustainable and Circular Manufacturing

-  21 Partners
-  11 Countries
-  7,2M€ Budget
-  36 Months

Circular TwAI will increase the performance, resilience and sustainability of discrete manufacturing and process industries by developing a novel AI platform for circularity.

- 3 USE CASES**
- Li-Ion Battery Packs in E-mobility**
 - Consumer Electric and Electronic Equipment Waste**
 - Petrol-Chemical Production Plants**



Sustainable manufacturing through AI technologies



End-to-end sustainability in industrial production



Industry agility and resiliency



Advanced circular manufacturing technologies throughout the product's lifecycle

 @CIRCULARTWAIN

 CIRCULAR TWAIN PROJECT

 CIRCULAR-TWAIN-PROJECT.EU

 ENGINEERING

 POLITECNICO DI TORINO

 tecnalia

 Fraunhofer

 aimen

 Wissaptech

 Suite5

 UNINOVA

 netcompany

 CORP-IC

 GFI

 recyclia

 revertia

 EXPERT AI

 teknopier

 cobat

 SOCAR

 EcoTECH

 SUPSI

 CIRCULAR ECONOMY RESEARCH CENTER

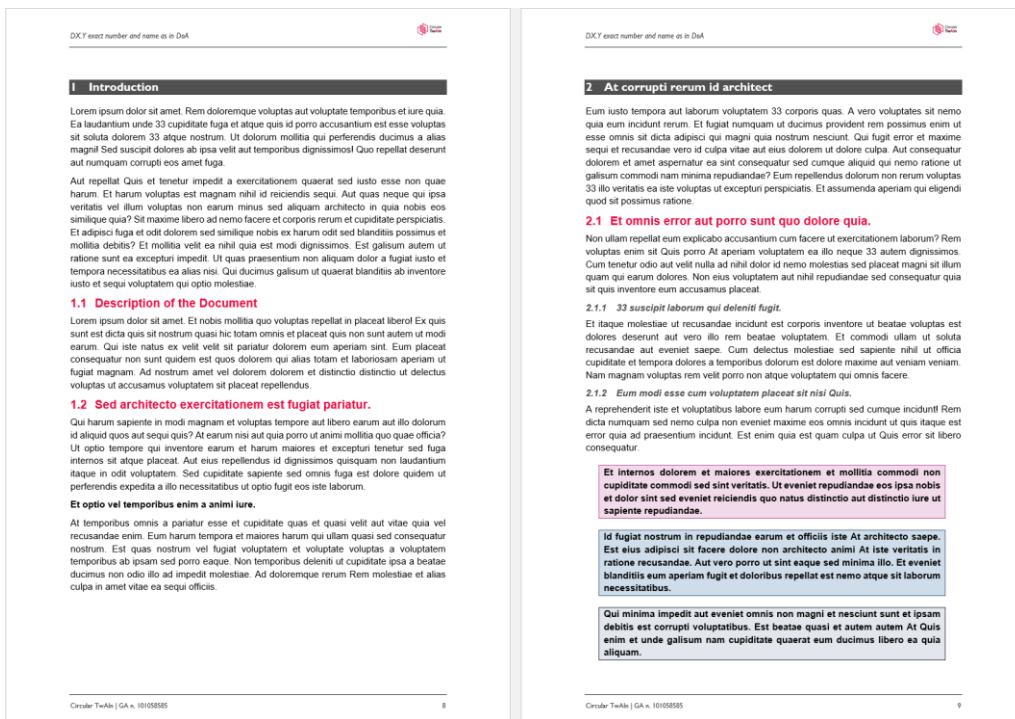
Figure 3-7: Banner

4 Templates

Templates for the project's documents (deliverables, meeting agenda and MoMs) and presentations were created to ensure that all material produced within the project's spec will be integrated and uniform according to its visual identity.

4.1 Deliverables

The deliverables template includes styles for headings, body text, tables, figures as well as captions and different text highlight options. On the top of every page, a header shows the title of the deliverable and the project's logo. At the bottom of every page there is a footer including the project's acronym, Grant Agreement number as well as the page number. All the elements described above are showcased in Figure 4-1.



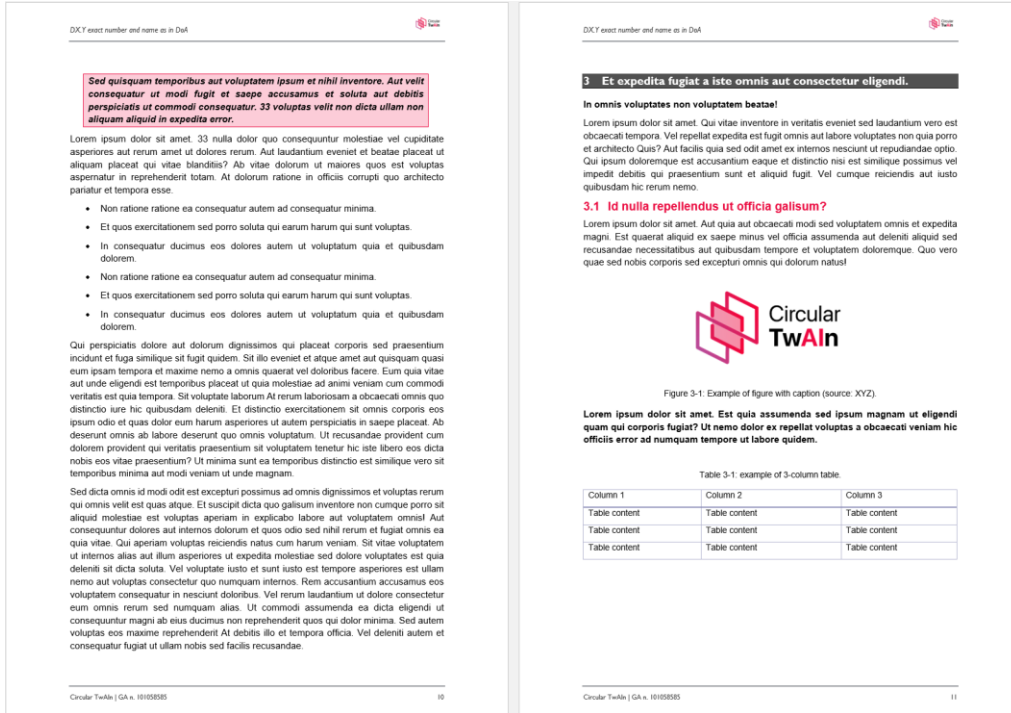


Figure 4-1: Deliverables Template

4.2 Meeting Agenda

The agenda template includes styles for headings, tables, and captions. On the top of every page is a header including the project’s logotype. At the bottom of each page there is a footer with the EU flag. All the elements described above, can be seen in Figure 4-2.

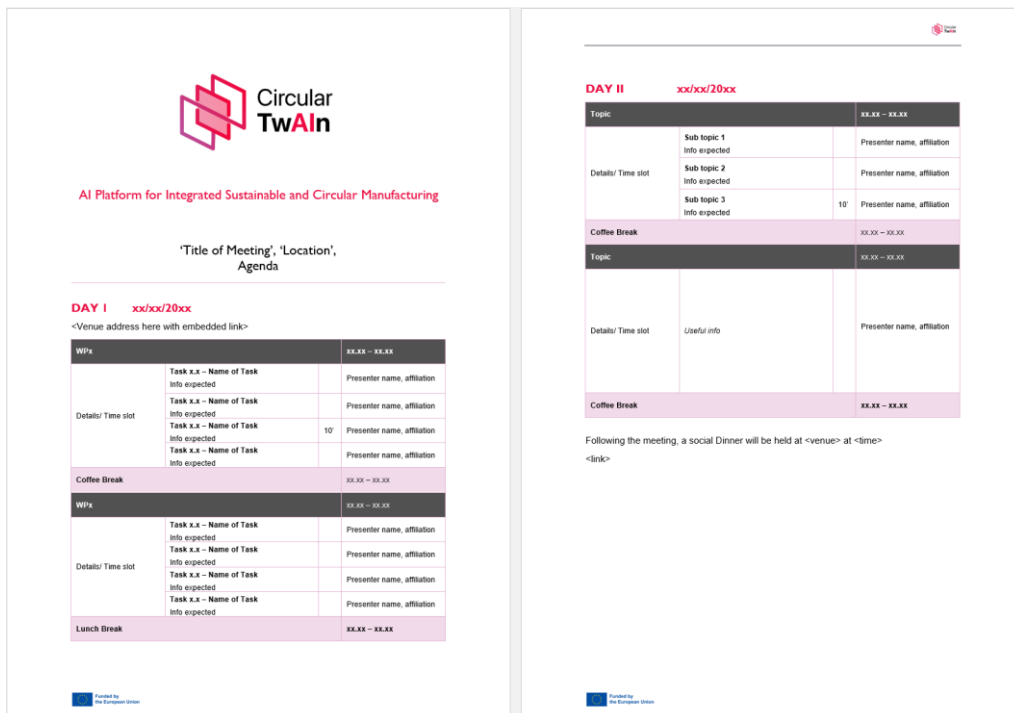


Figure 4-2: Meeting Agenda Template

4.3 Minutes of Meeting

The Minutes of Meeting template includes styles for headings, body text, tables, and captions. On the top of every page is a header including the meeting name and the project logo. At the bottom of each page there is a footer with the EU flag followed by the paging. All the above elements can be seen in Figure 4-3.

Replace with Meeting Title

2 Minutes Log

DAY I xx/xx/20xx

Topic	
Related Work Package(s) Task(s)	
Goal	
Minutes	
Next Meeting Date (optional)	

Topic	
Related Work Package(s) Task(s)	
Goal	
Minutes	
Next Meeting Date (optional)	

Topic	
Related Work Package(s) Task(s)	
Goal	
Minutes	
Next Meeting Date (optional)	

Funded by the European Union

4

Replace with Meeting Title

DAY II xx/xx/20xx

Topic	
Related Work Package(s) Task(s)	
Goal	
Minutes	
Next Meeting Date (optional)	

Topic	
Related Work Package(s) Task(s)	
Goal	
Minutes	
Next Meeting Date (optional)	

Topic	
Related Work Package(s) Task(s)	
Goal	
Minutes	
Next Meeting Date (optional)	

Funded by the European Union

5

Replace with Meeting Title

3 Participants List

Name	Organization	Day 1	Day 2
Angelo Marguglio	ENG	X	
Cinzia Rubattino	ENG	X	X
Elisa Rossi	ENG	X	X

Funded by the European Union

6

Replace with Meeting Title

4 Next Actions

ID	Description	Responsible Partner	Deadline
1			
2			
3			
4			
5			
6			
7			
8			

Funded by the European Union

7

Figure 4-3: Minutes of Meeting Template

4.4 Presentations

The presentation template includes styles for headings, body text and other visual elements making the most out of the project's colour palette. It has been created in a 16:9 widescreen format to be suitable for all screen types. The main idea was to produce a creative template that will brighten and energise Circular TwAln's presentations. The following figures show examples of the presentation template in PowerPoint, in both light and dark colour combinations.

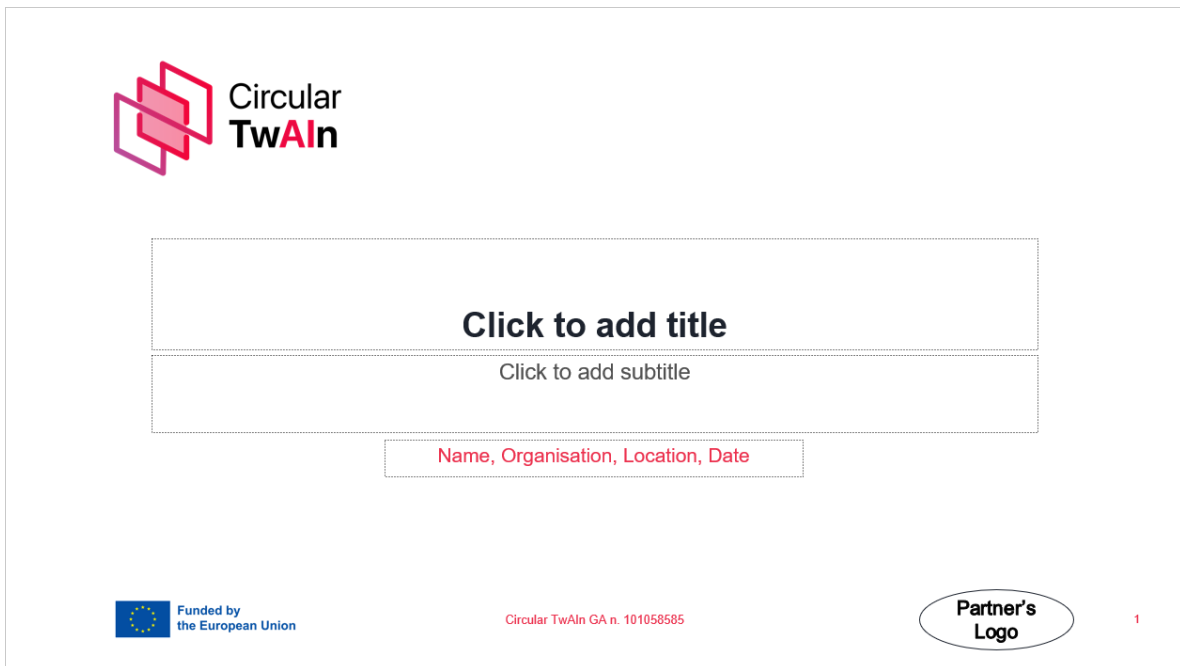


Figure 4-4: Presentation Template – Title Page in Light Background

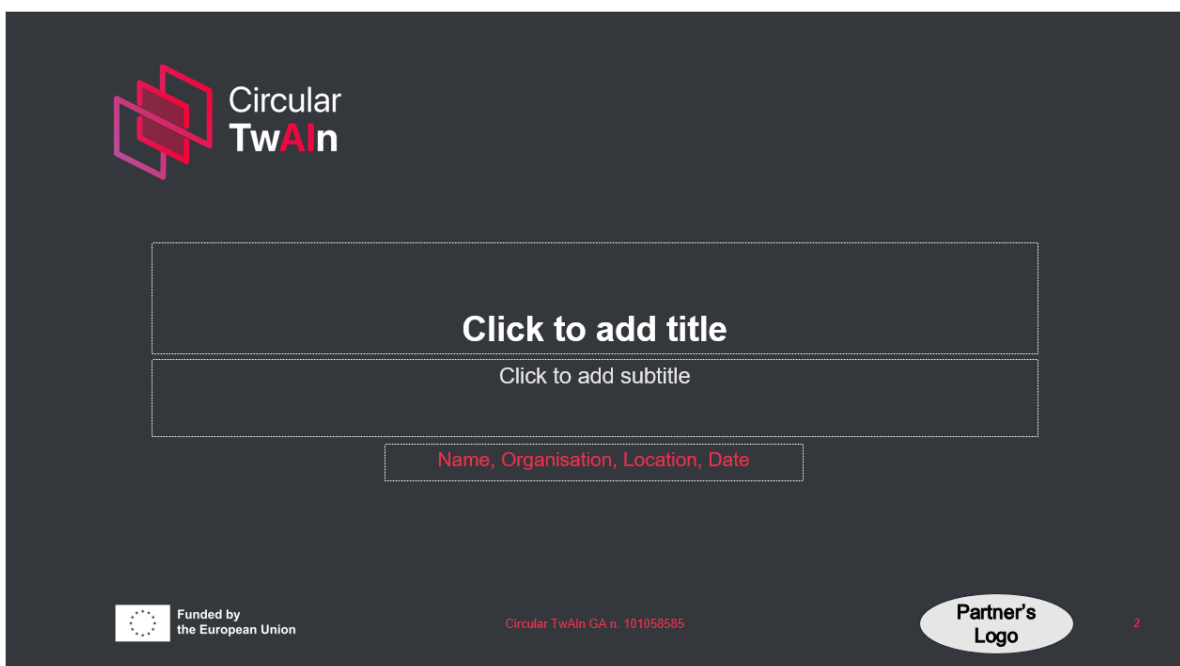


Figure 4-5: Presentation Template – Title Page in Dark Background

WP7: Progress and Status

Tasks

- T7.1: Design and Implementation of Communication Strategy
 - Leader: CORE, M1-36
- T7.2: Design and Implementation of Dissemination Strategy
 - Leader: CORE, M1-36
- T7.3: Legal Ethical issues, Standardisation, and Regulatory Sandboxes
 - Leader: EAI
 - M1-36

9

Figure 4-6: Presentation Template – Work Package Description

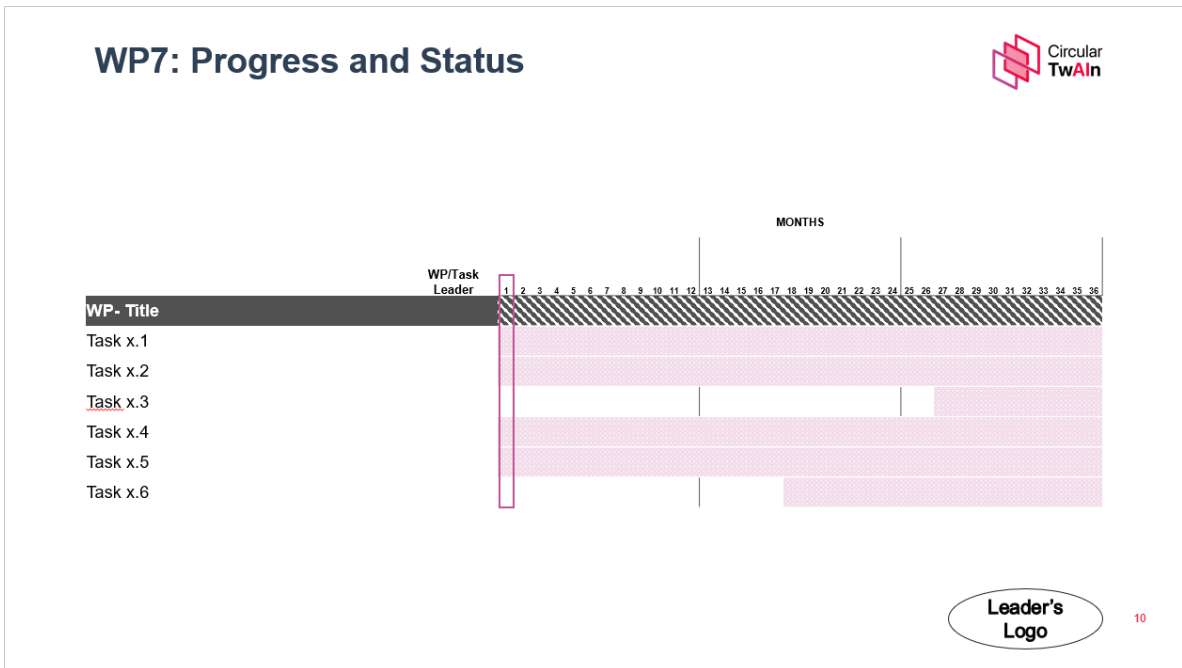


Figure 4-7: Presentation Template – GANTT Chart

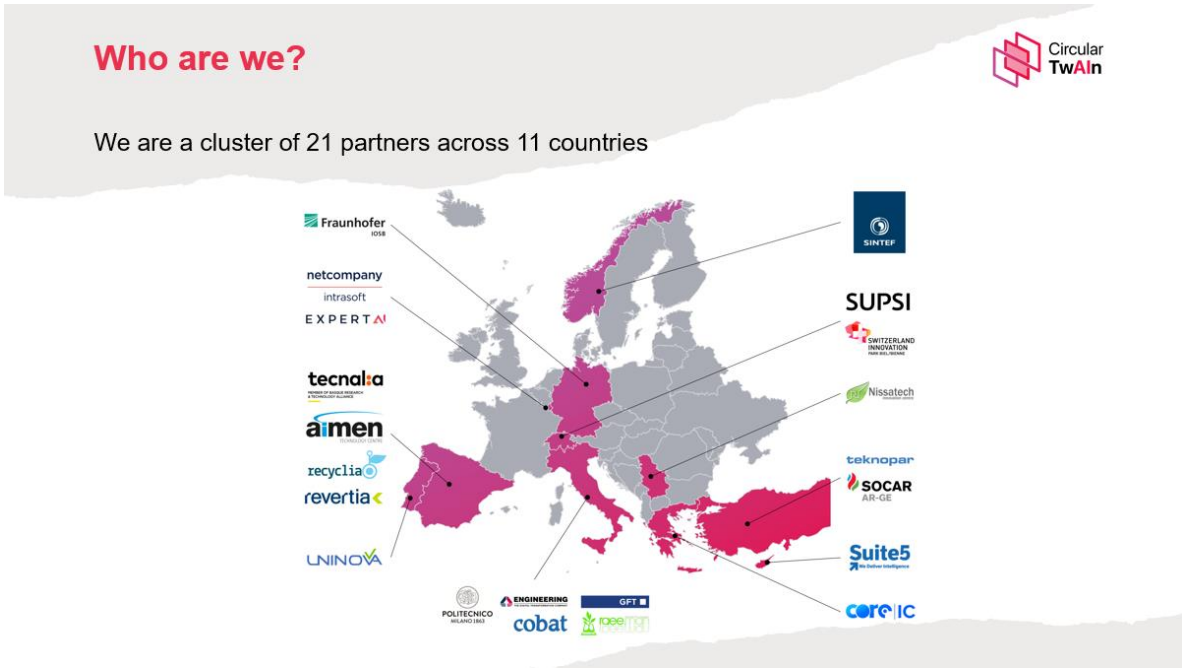


Figure 4-8: Presentation Template – Consortium



Figure 4-9: Presentation Template – Closing Page with Partners' Logos

5 Web Portal

A project's online presence can have a massive impact on the effectiveness of its message, as the website is its main Dissemination and Communication tool. It is the project's primary method of reaching out to the external stakeholders and the general public. The website ensures that all project related information is diffused as widely as possible and enhances the project's visibility and further promotion, ensuring Circular TwAln's message is being effectively communicated.

The goal was to launch the Circular TwAln website by M3, creating a powerful, contemporary, and elegant online presence that embodies the project's core objectives. Its dynamic management through integration with social networks that were also developed by M3 was a top priority during the project's initial phase.

CORE designed and developed the website as well as created and edited its content, drawing from the project's proposal. This website will be dynamic and continuously evolving, staying up to date with input provided by and in collaboration with the other project partners throughout the whole duration of the project.

5.1 Website's Structure

The website is hosted at <https://www.circular-twain-project.eu/>. All pages of the website have the Circular TwAln logo on the top-left and links to the project's social media on the top-right. In the footer of each page there is the EU funding emblem, the contact details of the Project Coordinator, the Technical Manager, and the Communication Manager, as well as a link to the Privacy Policy. Links to the main pages "Home", "The Project" ("Concept & Objectives", "Technology", "Use Cases"), "Partners" and "Resources" ("News & Press Releases", "Communication Material", "Project Deliverables") are included in the navigation pane accessible from all sub-pages.

5.1.1 Website Navigation Tree Map

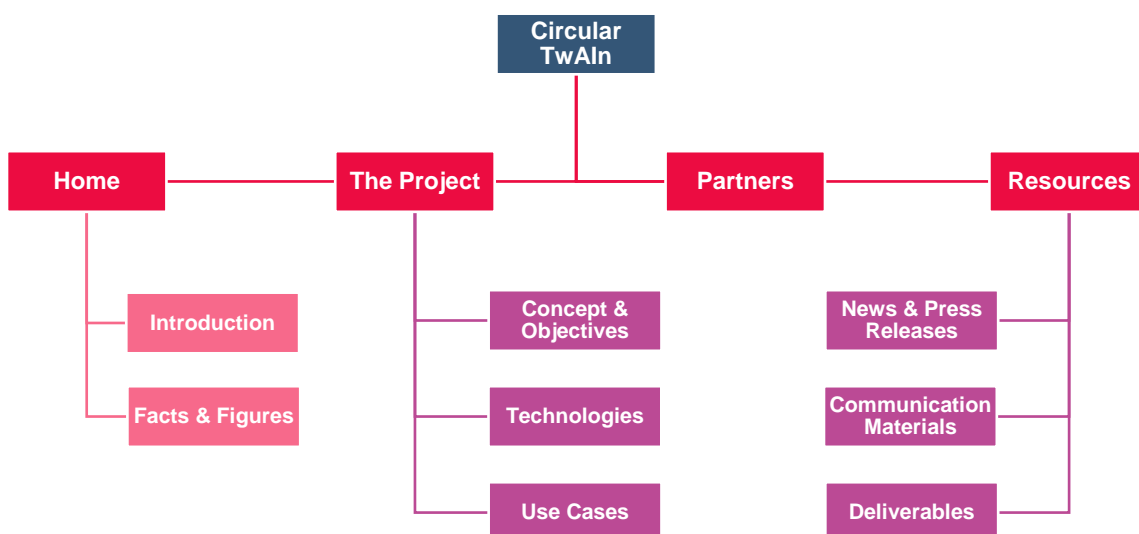


Figure 5-1: Website Navigation Tree Map

5.1.2 Essential Technical Features

Creating a mobile-friendly and responsive design was a top priority when designing the website. CORE tried to adopt the basics of UX design, by creating a contemporary, easy-to-navigate website with a focus on usefulness and usability.

The technical features exhibited on the website are:

- Complete responsiveness: all contents and pages have a mobile-ready version.
- Cross platform/desktop/browsers compatibility: the website supports five major browsers.

5.1.3 Aesthetic Elements

The website has a straightforward layout, with each page focusing on a different aspect of the project. Each page's arrangement is made easier by using illustrations, photos, and distinct background colours. The photos are all royalty free, and their selection was made with the accompanying text in mind to increase the cognitive load. The colour of the background in text subsections is white. On the contrary, dark backgrounds are used in several subsections that display data and more technical information.

Pop-up panes are used on occasions to avoid adding more material to the length of the page and keep the displayed content as brief as possible, while fitting on a single typical computer screen, allowing the visitor to maintain a mental map of their navigation throughout the site.

Images/visuals and diagrams have been added, mainly in the pages where the project's technology is described, to facilitate the comprehension of the innovation at hand and enhance awareness of the project's visual identity.

5.2 Main Pages and Essential Interactive Elements

5.2.1 Main Menu & Navigation Pane on Header

The website content is divided in four main sections as showcased in the following figure.

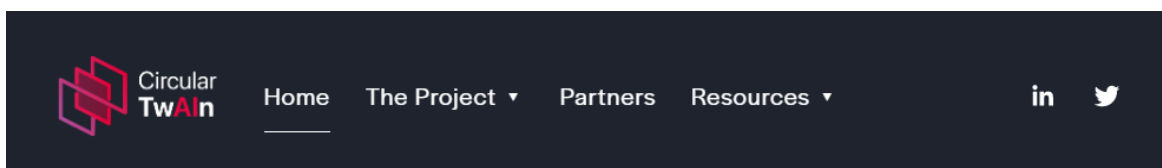


Figure 5-2: Main Menu – Navigation Pane

The navigation pane is on the top of the browser to allow easy and immediate accessibility to the entire website and has links to the following pages:

1. **Home:** The homepage provides a short description of the project at hand, its expected impact, as well as some facts and figures. Later, it will be complemented with a small newsfeed, displaying the latest news of Circular TwAIn.
2. **The Project:** 'The Project' contains a more detailed description of the project and consists of the following 3 subpages.

Concept and Objectives: In this page, one can find an elaborate description of the project architecture and a presentation of its main objectives.

Technologies: The main technologies deployed in the project are described in detail in this section.

Use Cases: This subpage includes the 3 industrial use cases in which Circular TwAln will be tested.

3. **Partners:** A presentation of all partners who participate in the project including a short description of the organisation/company, a logo, and a link to their website.
4. **Resources:** This cluster of pages provides updates about the course of the project and important resources material for different purposes. It consists of the following subpages:

News & Press Releases: A page that serves as a connection point with the audience and communicates the project's latest developments through Newsletters, Social Media feed etc.

Communication Material: A page to provide quick access to the Communication Material of the project like the logo kit, posters, flyers etc.

Project Deliverables: This page is dedicated to presenting an archive of the public Project Deliverables.

5.2.2 Footer Section

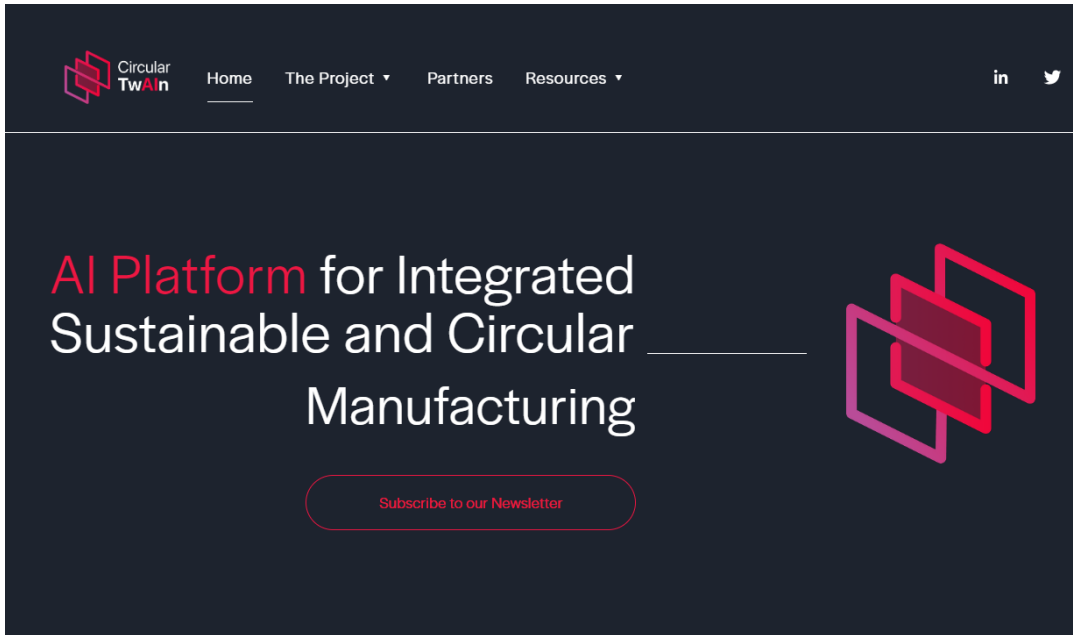
The footer section contains the official EU funding emblem, a link to the Privacy Policy as well as the contact details of the Project Coordinator, the Technical Manager, and the Dissemination & Communication Manager of the project.



Figure 5-3: Website Footer

5.2.3 Homepage

The introductory part of the Homepage begins with the project title and the icon of the Circular TwAln logo. Additionally, it provides a link to the newsletter subscription form and a brief description of the project and its main goal in a concise paragraph to keep the audience engaged without displaying too much information at once. Distinct colours were used in the page background for optimal division and allocation of information while in the text section a minimal, white background was used to improve the text's display and readability.



Circular TwAI will research, develop, validate and exploit a novel AI platform for circular manufacturing value chains, which will support the development of interoperable circular twins for end-to-end sustainability.

Based on the use of trustworthy AI techniques, the project will enable human centric sustainable manufacturing, fostering the transition towards Industry 5.0 as well as the integration and combination of different data from various sources over entire product life cycle considering sustainability aspects.

Figure 5-4: Homepage – Introduction to the project

The following section of the Homepage provides more information about the expected impact of Circular TwAI and the corresponding visual cues to enhance the assimilation of the information.



Figure 5-5: Homepage – Impact

This section is followed by a brief and boldly displayed list of the project's facts and figures about the Consortium members, duration, and funding.

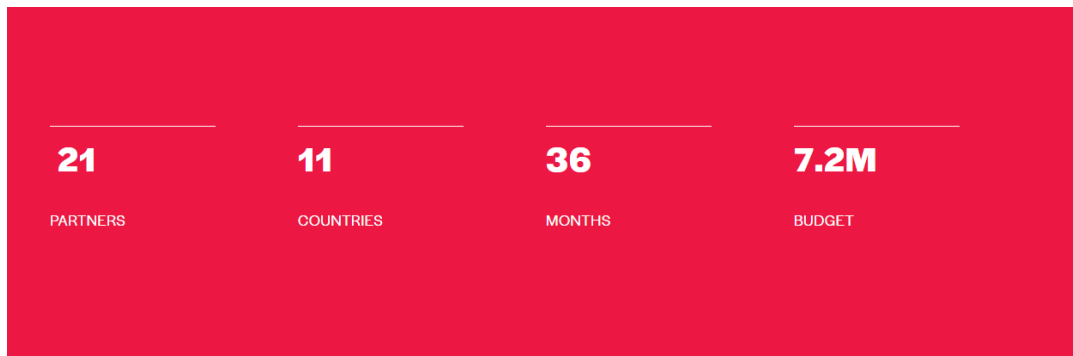


Figure 5-6: Homepage – Facts and Figures

5.2.4 The Project

'The Project' page consists of 3 subpages: 'Concept & Objectives', 'Technologies' and 'Use Cases'.

Concept & Objectives

The first part of this section briefly describes the project's concept, its goal, and the fundamental ideas on which the project was structured: *collaborative AI* and *seamless data sharing*.

Circular TwAln is developing a novel AI platform for circularity with the aim to increase the performance, resilience, and sustainability of direct manufacturing and process industries.

The project is based on 2 fundamental concepts.

Collaborative AI and Seamless Data Sharing.

Figure 5-7: The Project – Concept & Objectives – Introduction

It continues with the concept's visualisation as shown in Figure 5-8. The illustration highlights the 2 fundamental ideas composing the concept; the collaborative approach of AI technology, which allows reaching performances that man or machine cannot achieve independently and seamless data sharing which facilitates technical and semantical interoperability to boost the circular manufacturing system.

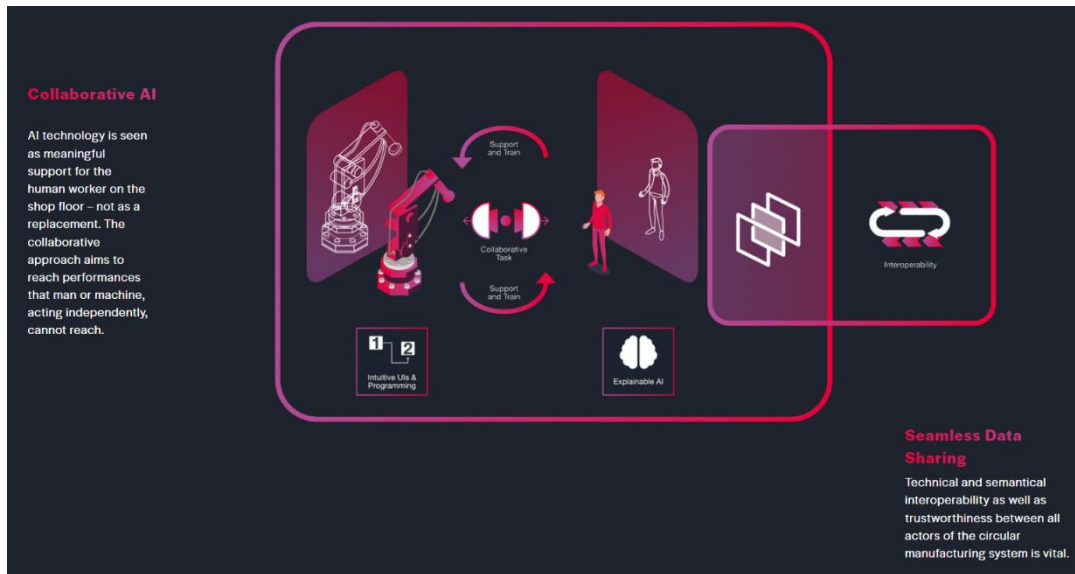


Figure 5-8: The Project – Concept's Illustration

The last part displays an overview of the project's main objectives, a combination of which will lower the barriers for all the stakeholders in manufacturing and process industry circular value chains to fully leverage trusted AI technologies, in ways that will enable end-to-end sustainability.

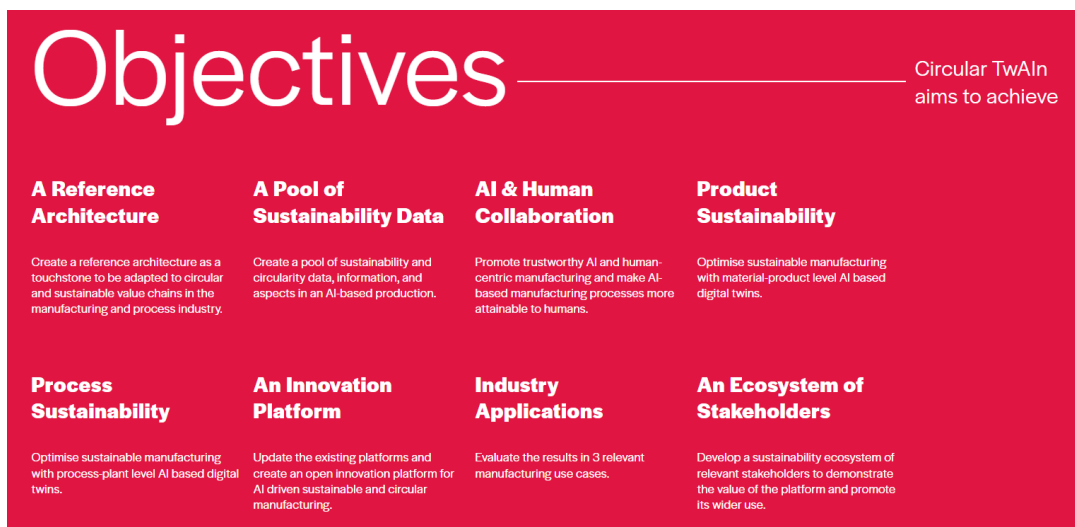


Figure 5-9: The Project – Objectives

Technologies

In this section of the website, the technologies deployed in the project are presented. In the introductory part, the Circular TwAI development framework is described and analysed, as well as the principles that run it. In particular, the audience is introduced to the 2 types of software modules that will be designed and published by the project, namely the interface and AI application modules, as shown in the figure below.

As part of the Circular TwAI Development Framework, the project will design and publish 2 different types of software modules.

Interface Modules: providing standard interface connectors to the digital twin of the process, product and human worker in order to feed the human-AI solutions with the appropriate data.

AI application modules: encapsulating all machine learning functionalities as elementary building blocks for virtuous human-AI solutions, which will facilitate the development and synthesis of complex AI pipelines.

This modular, service-oriented framework architecture allows to dynamically **combine, extend, add and deploy modules** according to the requirements of the specific target application.

The architectural framework is based on the principles of

Modularity	+
Standardisation	+
Openness	+
Hardware Independence	+

Figure 5-10: The Project – Technologies – Development Framework

In the following section, the modules are further explained and analysed, accompanied by a diagram/illustration, which displays the general structure of the technologies proposed as well as the relationships and interactions between them. The aforementioned illustration can be found in Figure 2-11.

Use Cases

Circular TwAI promotes circularity and end-to-end sustainability through trusted AI technologies in three industrial use cases from the discrete manufacturing and the process industry: De- and Re- Manufacturing Li-Ion Battery Packs in e-mobility, De- and Re- Manufacturing Consumer WEEE and Energy Optimisation in Petrol-Chemical Production Plants. For each of the demonstrators, there is a small description of the procedure and a relevant image from the respective industry. Additionally, there is a distinct section in each demonstrator which displays the operational goals through which each use case is developed.

De- and Re-manufacturing of Li-Ion battery packs in e-mobility

The strategic importance of this demonstrator lies in the automotive LIBs end-of-life treatment by performing the remanufacturing and the re-use of the disassembled cells with proper residual characteristics into second-life stationary applications. The battery cells which are not compatible with second-life applications, are recycled with the aim of recovering high-value materials and allowing those materials' re-use as secondary raw materials (e.g., Li, Co, Ni, Mn, Fe, C, and other metals).

The mission of this use case lies in five operational goals

- Computer-vision driven collaborative robotics for the disassembly of LIB packs
- Machine learning aided automated disassembly of LIB modules
- AI tool for the characterization of the LIBs state-of-health combining historical and testing data
- AI tool for optimised mechanical recycling of degraded LIBs
- Market oriented holistic decision-support system for the LIBs de- and remanufacturing

Figure 5-11: The Project – Use Cases Example

5.2.5 Consortium

This page is dedicated to presenting all members of the Consortium. The partners are presented in simple grid containing the company/organisations' logos in the same order they appear in the project's Grant Agreement, as shown in the figure below.



Figure 5-12: Consortium – Partners' grid

By clicking on the logo, a white pop-up window appears which offers a short presentation of the correspondent company/organisation, accompanied by a link to the respective website, as shown in the example below.

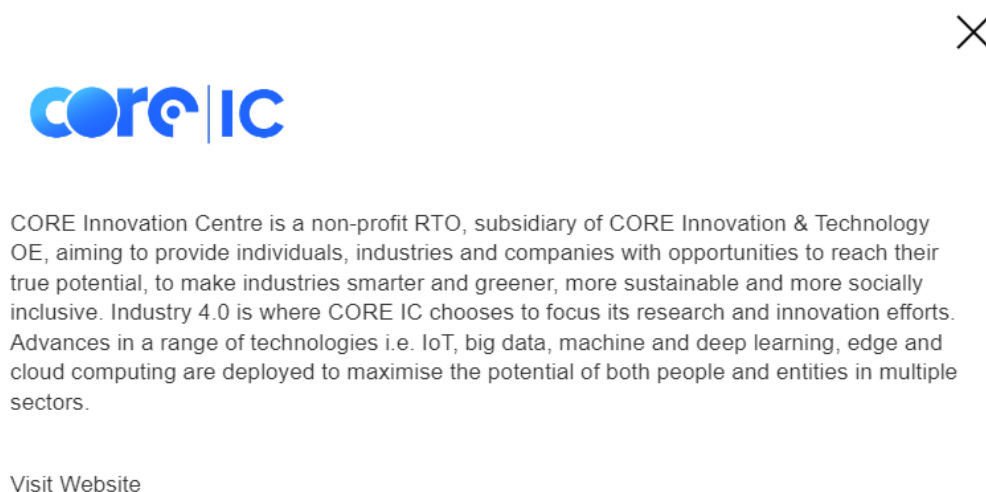


Figure 5-13: Consortium – Example of company/organisation presentation

5.2.6 Resources

The 'Resources' page functions as a point of communication with the audience as it will be the most frequently updated page, displaying the latest news, useful links, the

communication materials, and the public deliverables of the project. At this moment, being in the project's beginning there is low input for these subpages, but they will gradually be enriched with new material.

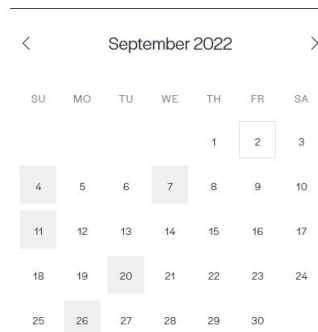
News & Press Releases

As the project advances and the respective communication and dissemination activities increase, this subpage will feature network events, fairs, workshops, conferences, and exhibitions. In particular, the audience can find a carousel displaying the project's press releases with chronological order, a calendar of project related events and finally the Twitter feed, showing the latest updates as posted on Twitter.

Press Releases



Events




Twitter Feed



Figure 5-14: Resources – News & Press Releases


Communication Material

On this subpage the visitors have access to the Communication Material of the project. This material comprises of the project's logo kit, the leaflet, poster, and banner as well as the project presentation and the e-brochure which will be uploaded onwards.




Download the project's logo in PNG and SVG filetypes for various use cases.

[Download](#)




Download the project's brochure in A5 format.

[Download](#)



Download the project's Banner in 80x200cm format.

[Download](#)



Download the project's poster, in A3 format.

[Download](#)

Figure 5-15: Resources – Communication Material

Project Deliverables

All public submitted deliverables will be available for downloading, in .pdf format from this subpage.

6 Conclusions and Future Outlook

The present deliverable is a report on the procedures followed while creating the project's visual identity which also guided the design of the website and communication materials.

The website will be continuously evolving along with the project, always staying up to date with the project's technological advancements and serving its primary goal, to effectively communicate the project and its results to the target audiences and the general public. More specifically, the Resources section of the website will be frequently updated to include the latest press releases, news, and relevant events.

Following the same rationale, all print communication material will be staying up to date as the project progresses and starts producing its first results. The same materials along with the public project deliverables will be uploaded in the respective sections of the Resources page of the website.

Summarising, the next steps for the abovementioned activities are:

- Website update
 - Continuous update of the homepage to reflect the project's state and catch the visitors' interest. For example, a pdf summarising the progress of the project could be included to inform about the latest updates.
 - Update of the Resources page, adding more news, public deliverables, newsletters, press releases etc.
 - Build-up the project's social media presence, the connections and interrelations between social media accounts and the project website to increase traffic and newsletter subscriptions.
- Communication Materials
 - Update and adaptation of the rest of materials as the project evolves and new results come in.
- Templates
 - Update of the project templates according to the project's evolution when or if needed.



**Funded by
the European Union**

*This project has received funding from the European Union's Horizon
Europe research and innovation programme
under grant agreement No 101058585*