

ZEBRA LIFE

ZERO EMISSION BIOCHEMICAL AND RENEWABLE ADDITIVES

D7.2. PROJECT WEBSITE



PROJECT INFORMATION

GRANT AGREEMENT NUMBER	101074460
PROJECT TITLE	Zero Emission Biochemical and Renewable Additives
PROJECT ACRONYM	LIFE21-ENV-ES-ZEBRA-LIFE
FUNDING SCHEME	LIFE Programme
PROJECT START DATE	November 1st 2022
DURATION	48 months
CALL IDENTIFIER	LIFE-2021-SAP-ENV
PROJECT WEBSITE	Not available, WIP

DELIVERABLE INFORMATION

DELIVERABLE NO.	D18 (D7.2)
DELIVERABLE TITLE	Project Website
WP NO.	WP7
WP LEADER	INVENIAM
CONTRIBUTING PARTNERS	CENER / INVENIAM
AUTHORS	Miriam Romero, Inés del Campo
CONTRIBUTORS	
REVIEWERS	
CONTRACTUAL DEADLINE	30/04/2023
DELIVERY DATE	05/04/2023
DISSEMINATION LEVEL	Public

DOCUMENT LOG

VERSION	DATE	AUTHOR	CHANGE DESCRIPTION
V1.0	29/03/2023	Miriam Romero, Inés del Campo	First draft
V1.1	04/04/2023	Miriam Romero	Consolidated
V1.2	04/04/2023	Inés del Campo	Final review, approved



DISCLAIMER

Co-funded by the European Union

“Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.”

ZEBRA-LIFE PROJECT WEBSITE

TABLE OF CONTENTS

1. Executive summary	5
2. The ZEBRA-LIFE website.....	5
1.1. Hosting	5
1.2. Design and structure	6
1.3. Management.....	10

LIST OF FIGURES

Figure 1. ZEBRA-LIFE website screenshot	5
Figure 2. Website menu.....	6
Figure 3. Home section.....	6
Figure 4. "What is ZEBRA" section (I)	7
Figure 5. "What is ZEBRA" section (II).....	7
Figure 6. "Pillars" section (I)	8
Figure 7. "Pillars" section (II)	8
Figure 8. "Pillars" section (III).....	9
Figure 9. "Latest news" section.....	9
Figure 10. "Contact" section	10

1. EXECUTIVE SUMMARY

This document includes information about the online presence of the project: the ZEBRA-LIFE website. The document contains some generic information about its hosting, design and structure and a summary of the website content: general overview of the project objectives, workplan, expected results and impact, updated news as well as the contact methods to ask for more information about the project. The website also informs about the consortium composition with links to the project partner's websites, public material such as Press Releases and the project social media (LinkedIn and Twitter). In addition, this document includes a short section dedicated to the website management.

2. THE ZEBRA-LIFE WEBSITE

1.1. HOSTING

The ZEBRA-LIFE website has been developed by CENER and is available since January the 31st, 2023 at:

<https://zebra.bio2c.es/>

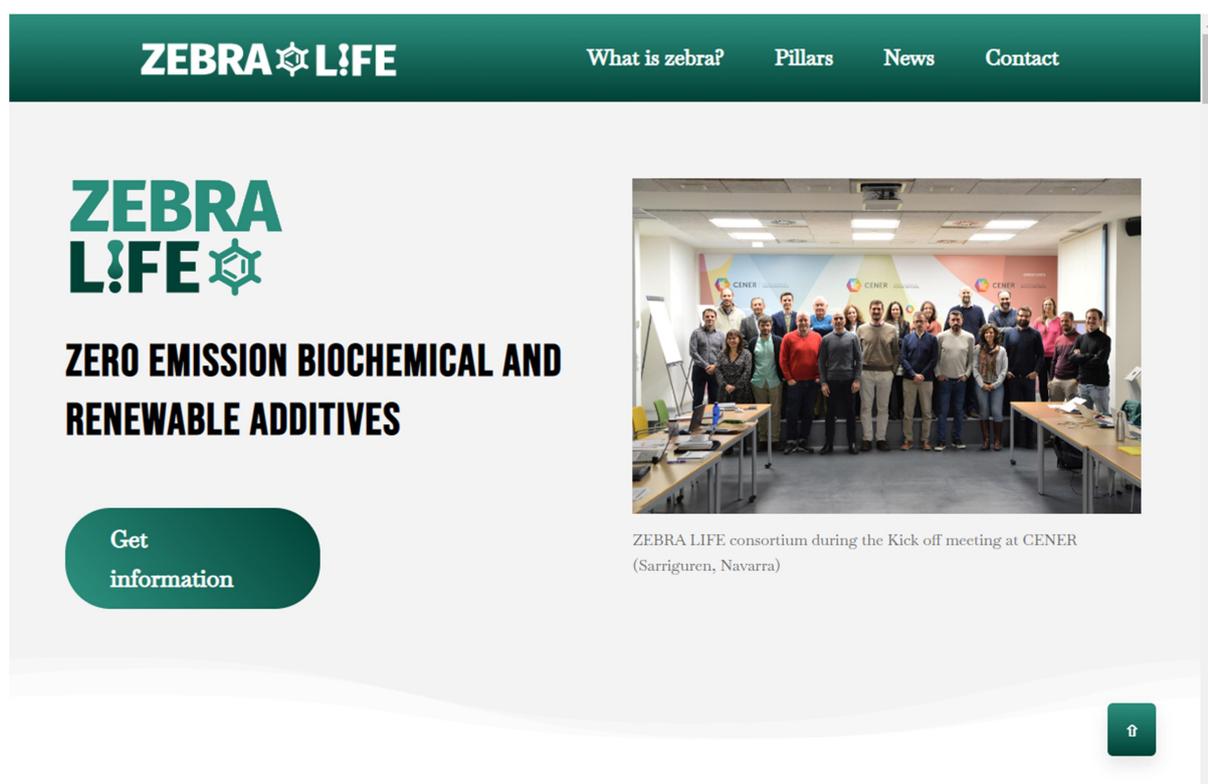


Figure 1. ZEBRA-LIFE website screenshot

The website is hosted under the domain of CENER's Biorefinery and Bioenergy Centre webpage (<https://www.bio2c.es/>, "Projects" section)

1.2. DESIGN AND STRUCTURE

The website was created using a customized theme based on ZEBRA-LIFE corporate image as described on the deliverable D7.1 “Dissemination and Communication Plan”.

The initial setup of the project website is set as a vertical scrolling page where all the section of the site can be seen just by scrolling down. It includes the following site map:



Figure 2. Website menu

- **HOME:** Main page with the project logo, long name, a picture of the project consortium and a button to access the contact information.

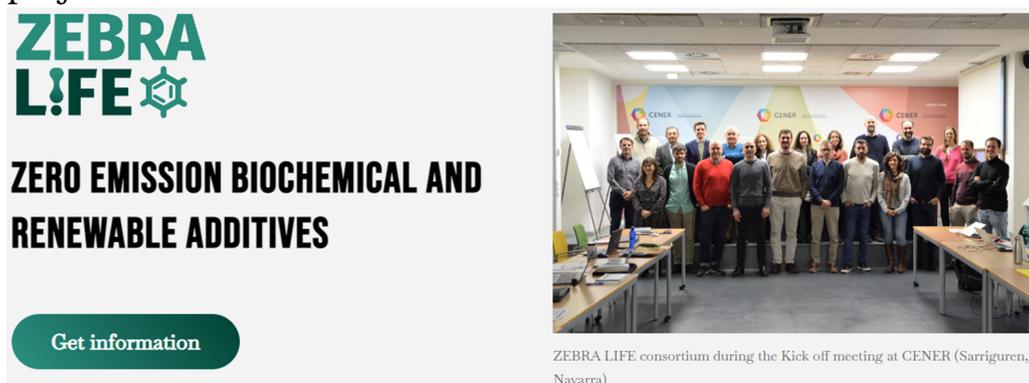


Figure 3. Home section

- **What is Zebra:** Includes a short introduction of the project and has currently three subsections.
 1. What is ZEBRA-LIFE?
 2. Why is ZEBRA-LIFE technology valuable?
 3. Advantages

WHAT IS ZEBRA LIFE?

CENER has developed a pioneering thermo-oxidative depolymerization process to extract high value added bioaromatic compounds with high antioxidant activity from lignin that can be used to substitute the existing fossil fuel-based additives in the market for different applications (rubber, fuels, lubricants, food industry, and cosmetics). The ZEBRA-LIFE project addresses two important objectives:

- Increase the renewable energy share and decarbonisation in the pulp and paper industry
- Reduce the environmental and health impacts caused by the production and use of synthetic fossil additives in multiple industrial products.

The ZEBRA LIFE project started in November 2022 and will run for four years. It has received funding from the European Union's LIFE programme under grant agreement number 101074460.

WHY IS ZEBRA LIFE TECHNOLOGY VALUABLE?

- Europe is the second largest producer of pulp and paper in the World. In 2019 it produced 38 million tonnes which represented 21% of the world paper production. This industry produces a significant amount of black liquor (BL), a byproduct which is predominantly burnt for energy recovery.
- 35-45% of BL composition is lignin, a natural polymer. Lignin is composed of aromatic units, which can be extracted from BL and, after a series of conversion stages, used as substitute for synthetic aromatic compounds in various industries including, cosmetic, food, fuel, lubricants and rubber.

Figure 4. "What is ZEBRA" section (I)



Lignin extracted from black liquor (CENER)

ADVANTAGES

- There are currently no commercial technologies for the cost-effective extraction of aromatics from lignin. Current technologies have either got stuck at non-commercial scales or are focused on low value-added materials, making it unprofitable for the paper manufacturers to invest in the infrastructure needed to extract black liquor from lignin.
- The technology that has been developed for the ZEBRA-LIFE project enables paper mills to valorise their black liquor by-product in the form of a natural antioxidant (AOx) and UV filter product to create a new circular value chain. Also is extremely attachable to current pulp and paper industrial plants, due to the similar feeding and release aqua-inorganic streams.
- The ZEBRA-LIFE solution will create industrial symbiosis and create new circular value chains, using resources/by-products across industrial sectors.

Figure 5. "What is ZEBRA" section (II)

- **ZEBRA-LIFE Pillars:** Includes a short description of the project and has currently three subsections.
 1. Impacts
 2. Work Plan
 3. Consortium partners list including links to the corresponding websites.

ZEBRA LIFE PILLARS



IMPACTS

ZEBRA-LIFE technology enables paper mills to valorise their black liquor by-product based on lignin in the form of a natural antioxidant and UV filter product to create a new circular value chain.

Know more features

The potential impacts of ZEBRA LIFE project are:

- Reducing the damage to the environment from the pulp & paper industry



Figure 6. “Pillars” section (I)

ZEBRA LIFE WORKPLAN

During the project, the consortium will look to:

- Scale the chemical depolymerisation and fractionation technology up to a pre-commercial scale (20Kg/h lignin processing) (TRL 7).
- To produce and test bioaromatic compounds (ZEBRA LMW and ZEBRA MMW) specifically formulated as antioxidant and UV-filters in a series of selected applications to substitute synthetic additives and create a circular value chain based on industrial symbiosis.
- Develop the technical cost benefit analysis and business case for pulp & paper manufacturers.
- Prepare the technology for full commercial exploitation and replication across Europe.
- Ensure all stakeholders and community members are involved



Figure 7. “Pillars” section (II)

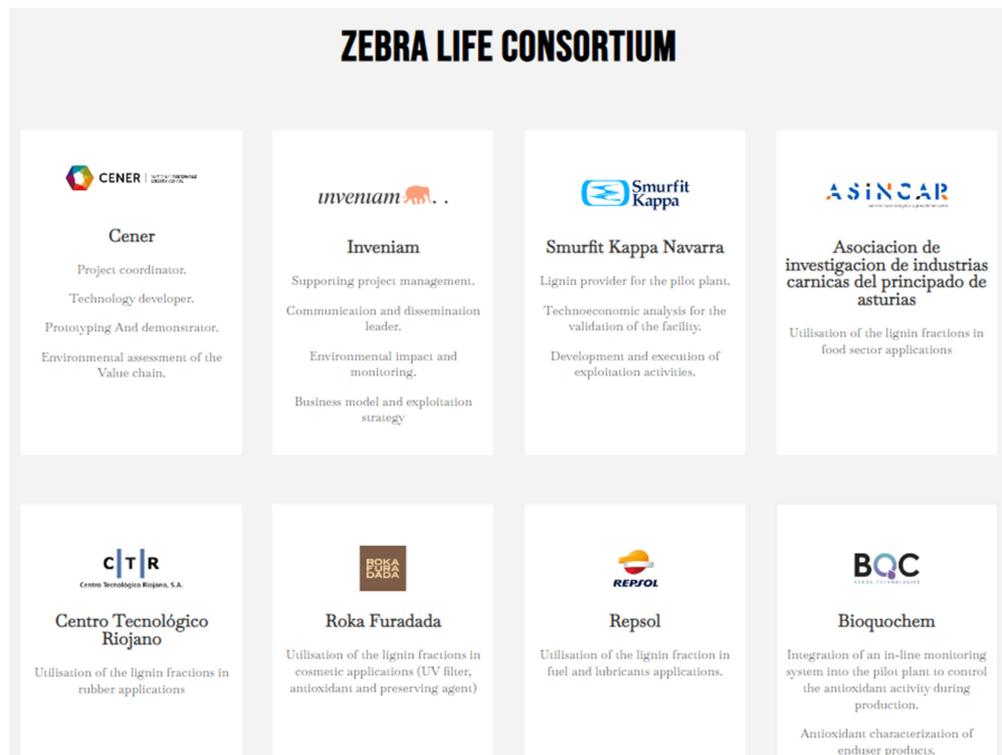


Figure 8. "Pillars" section (III)

- **Latest news:** where project post/updates will be published.

LATEST NEWS



ZEBRA-LIFE kicks off, a project to produce renewable origin antioxidants from the pulp and paper industry by-products.

Last November, the Centro Nacional de Energías Renovables (CENER) launched a new project, with the objective to develop a novel technology to take advantage of the black liquor of the pulp and paper industry...

[Know more->](#)



ZEBRA-LIFE - Zero Emission Biochemical and Renewable Additives

CENER has developed a pioneering thermo-oxidative depolymerization process to extract high value added bioaromatic compounds with high antioxidant activity from lignin that can be used to substitute the existing fossil fuel-based additives in the market for different applications...

[Know more->](#)

Figure 9. "Latest news" section

- **Contact:** including a contact form and the link to the social media accounts.

CONTACT

Inés del Campo
Biomass Department
E-mail: zebralife@cener.com
Tlf. +34 948 252 800

Name Email

Subject

Text

I accept the [Privacy Policy](#)

 Co-funded by the European Union under the Grant Agreement n. 101074460. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.

Figure 10. "Contact" section.

1.3. MANAGEMENT

The ZEBRA-LIFE website is mainly managed by the partner hosting the website (CENER) but inputs from partner INVENIAM are also required for content update. Management of the blog section is also given to partner INVENIAM in order they may contribute on writing blog posts.

ZEBRA-LIFE project will be updated and extended continuously throughout the project.