
BIO-FLEXCLC

**Flexible chemical looping combustion for combined heat and power production from
biogenic residues with negative emission**

HORIZON EUROPE GRANT AGREEMENT NUMBER: 101147904

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WP7 -Exploitation, Dissemination and Communication

D7.4 Public project website

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Dissemination Level		
PU	Public	X
SEN	Sensitive, limited under the conditions of the Grant Agreement	

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1. EXECUTIVE SUMMARY (3 pages max. all points)

1.1. Description of the deliverable content and purpose

This document reports the development of the website of the Bio-FlexCLC project. In particular it is reporting the public version of the website.

The deliverable is a deliverable type DEC (Websites, patents filing, press & media actions, videos, etc.) and as such, this document only reports some description and pictures of the actual website.

As for the DoA, the deliverable is developed and managed by 1CUBE. However, this living website is constructed with the information and materials developed by all partners of Bio-FlexCLC.

1.2. Deviation from objectives

No deviations were observed.

2. Introduction

As part of the Dissemination and Communication actions, one of the most powerful tools to be used by Bio-FlexCLC project is the public website.

The open part of the website is used for both communication and dissemination of results. Public deliverables can be downloaded from the website.

This deliverable report shows some of the features of the public website and reports some pictures as well.

It remains a task of 1CUBE to upload all contents on the website as soon as it is made available from partners, thus the website has to be seen as a living environment that will grow as the project progresses.

3. Background of the Bio-FlexCLC project

The Bio-FlexCLC consortium aims at developing and demonstrating a full-chain technology that utilizes biogenic residues and wastes for flexible CHP production with the possibility of cost-effective CO₂ capture.

The concept is based on the chemical-looping technology and has the main features of i) low cost and energy for CO₂ capture, as there is no gas separation equipment needed, ii) 100% CO₂ capture possible while having low emissions of NO_x, SO_x and other harmful components, iii) low corrosion with improved steam data for improved electrical efficiency, iv) flexible system with respect to the heat/power ratio and v) flexibility to operate the system as a normal circulating fluidized bed without CO₂ capture if conditions are not amiable for this. With such a flexible system we believe that end-users would be more willing to invest in CHP systems with BECCS even without current policy instruments in place.

The idea is to combine the break-through chemical-looping combustion (CLC) technology with conventional circulating fluidized bed (CFB) boilers, a technology widely used in Scandinavia and Europe for combined heat and power production. Bio-FlexCLC concept operating in CLC mode enables CHP production with negative emissions at low-cost while the concept is flexible to switch to CFB boiler mode to produce CHP with net-zero emissions.

Investing in CHP technologies utilizing biogenic and waste fuels, as developed in the Bio-FlexCLC project, offers a range of enduring advantages:

- A fuel combustion facility which can achieve negative emissions with CO₂ capture.
- Facilitating the utilization of challenging-to-exploit or low-value bio resources like organic wastes.
- Creating new employment opportunities, particularly in biomass or residue-rich regions, such as rural areas.
- Reducing reliance on fossil fuels and mitigating the need for oil imports.
- Enhancing local and regional production autonomy and supply security.
- Most notably, contributing to the principles of the circular economy, particularly when resources like agricultural residues are effectively harnessed.

4. Public Website

The Bio-FlexCLC project website has been developed according to schedule. The project website is accessible at [https:// www.bioflexclcproject.eu/](https://www.bioflexclcproject.eu/).

An impression of the project website is presented in the Figure 1.

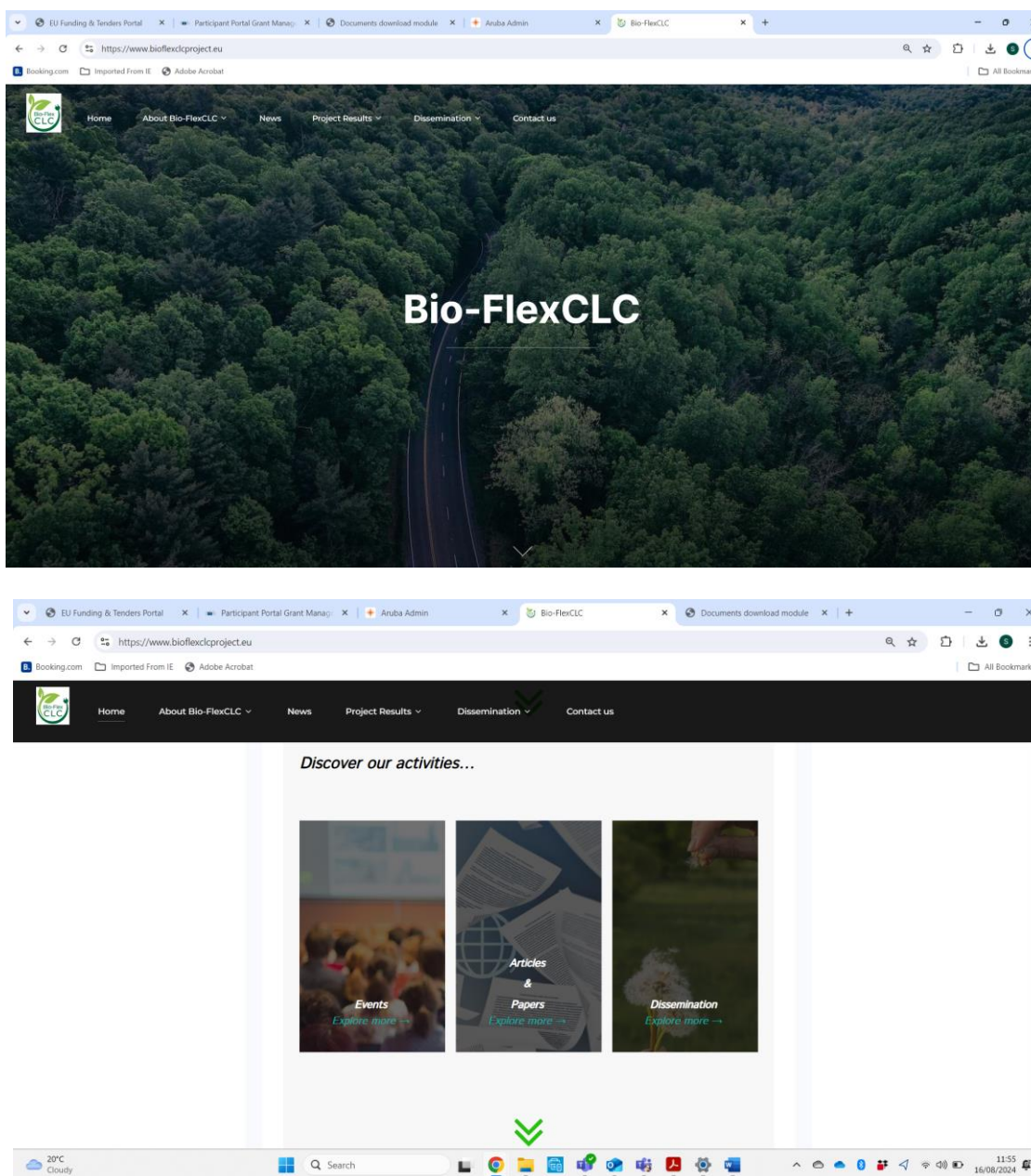


Figure 1. Bio-FlexCLC project website, screenshots of the home page.

The website has been designed in order to present the project aims as well as the main activities and results to all interested stakeholders.

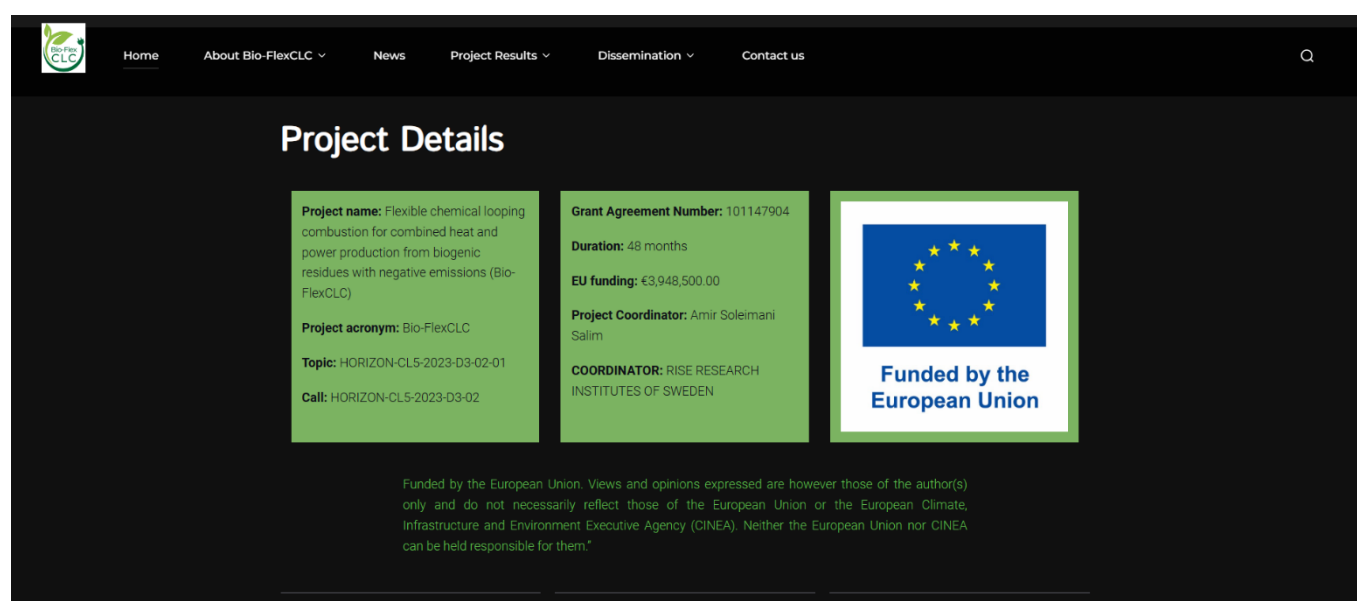
The role of the website in the communications strategy is to provide a place for people interested in the project to get more in-depth information about the project activities and results. The dedicated website will produce an extensive record of all publications and communications originated on the course of the project.

The main website sections and their sub-pages available to each user are listed below:


- Home
- About Bio-FlexCLC project: Introduction – Objectives – Expected results and Long term impact
- Partners

- News
- Project Results: Articles and Publications
- Dissemination: Newsletters, Presentations, Webinars, Videos
- Contacts

is also worth mentioning that all pages have the quite prominent bottom part reporting the information about the funder and the call, as well as the links to the social media (an example is presented in Figure 2).



Project Details

<p>Project name: Flexible chemical looping combustion for combined heat and power production from biogenic residues with negative emissions (Bio-FlexCLC)</p> <p>Project acronym: Bio-FlexCLC</p> <p>Topic: HORIZON-CL5-2023-D3-02-01</p> <p>Call: HORIZON-CL5-2023-D3-02</p>	<p>Grant Agreement Number: 101147904</p> <p>Duration: 48 months</p> <p>EU funding: €3,948,500.00</p> <p>Project Coordinator: Amir Soleimani Salim</p> <p>COORDINATOR: RISE RESEARCH INSTITUTES OF SWEDEN</p>	 <p>Funded by the European Union</p>
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Figure 2. Screenshot of project details including the name, acronym, duration, budget, funder, call and the Grant Agreement number

The project partners are also introduced and each one has a separate page. Figure 3 shows the screenshot of “Discover Our Partner” on the website.

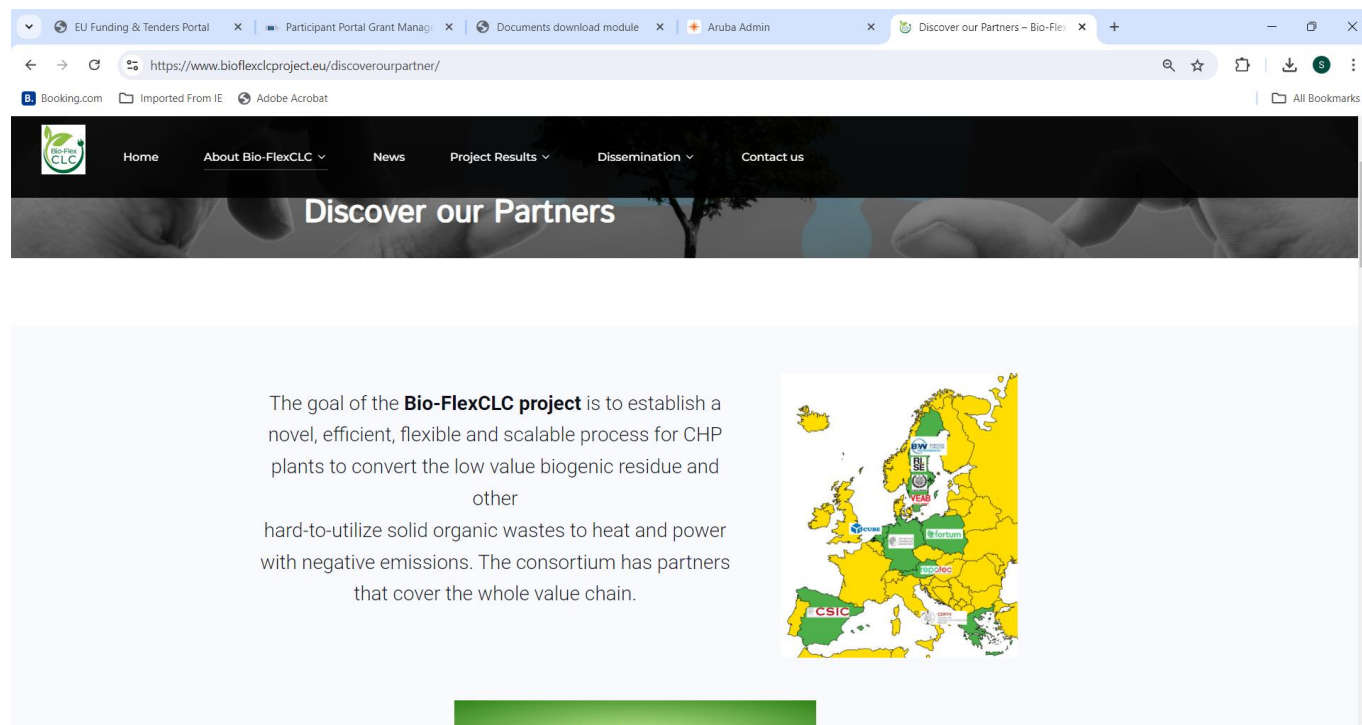


Figure 3. Screenshot of “Discover Our Partner” on the website

5. CONCLUSIONS

This Report shows the public website of the Bio-FlexCLC project. The website is being already advertised through the social media and it is the portal towards the results of the project. The website is linked with the different social media to report same information and news everywhere.

The website will be populated as the project progresses and will also be used to store the publicly available Bio-FlexCLC related contents such as the newsletters, papers, presentations etc.